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AND

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Bright and beautiful June! Embroidered with clusters of odorous roses, and laden with ruddy cherries and strawberries; rich with the freshness of spring, and the luxuriance of summer,—leafy June! If any one's heart does not swell with the unwritten thoughts that belong to this season, then is he only fit for "treasons, stratagems and spoils." He does not practically believe that "God made the *country*."

Flora and Pomona, from amid the blossoming gardens and orchards of June, smile graciously as we write these few introductory words to their circle of devotees. Happy are we to know that it is not to us a new or strange circle, but to feel that large numbers of our readers are already congenial and familiar spirits. Angry volumes of politics have we written none; but peaceful books, humbly aiming to weave something more into the fair garland of the beautiful, and useful, that encircles this excellent old Earth.

To the thousands, who have kindly made our rural volumes part of their household library, we offer this new production, which begins to unfold itself now, in the mid-summer of the year. In its pages, from month to month, we shall give them a collection of all that can most interest those whose feelings are firmly rooted in the soil, and its kindred avocations. The garden and the orchard; the hot-house and the conservatory; the park and the pleasure grounds; all, if we can read them rightly, shall be made to preach useful lessons in our pages. All fruitful and luxuriant grounds shall we revel in, and delight to honor. Blooming trees, and fruitful vines, we shall open our lips to praise. And if nature has been over-partial to any one part of the globe, either in good gardens, fair flowers, or good fruits,—if she has any where lavished secret vegetable treasures that our cultivators have not yet made prizes of, we promise our readers to watch closely, and to give a faithful account of them. Skilful cultivators promise to make these sheets the repository of their knowledge. Sound practice, and ingenious theory will be continually developed and illustrated. The humblest cottage kitchen garden, as well as the most extended pleasure grounds, will occupy the attention of the pens in our service. Beautiful flowers shall picture themselves in our columns, till even our sterner utilitarians shall be tempted to admire and cultivate them; and the honeyed, juicy gifts of Pomona shall be treated of till every one who reads shall discover that the most delicious

products of our soil are no longer *forbidden* fruits.

Fewer, perhaps, are there, who have watched as closely as ourselves, the zeal and enthusiasm which the last five years have begotten in American Horticulture. Every where, on both sides of the Alleganies, are our friends rapidly turning the fertile soil into luxuriant gardens, and crying out loudly for more light, and more knowledge. Already do the readers of rural works in the United States number more than in any Cisatlantic country, except gardening England. Already do our orchards cover more acres than those of any other country. Already are the banks of the Ohio becoming famous for their delicate wines. Already are the suburbs of our cities, and the banks of our broad and picturesque rivers, studded with the tasteful villa and cottage, where a charming taste in ornamental gardening is rapidly developing itself. The patient toil of the pioneer and settler has no sooner fairly ceased, than our people begin to enter with the same zeal and spirit into the refinements and enjoyments which belong to a country life, and a country home. A fortunate range of climate—lands fertile and easily acquired, tempt persons even of little means and leisure into the delights of gardening. Where peaches and melons, the richest fruits of the tropics, are raised without walls—where apples and pears, the pride of the temperate zones, are often grown with little more than the trouble of planting them,—who would not be tempted to join in the enthusiasm of the exclamation

"Allons mes amis, il faut cultiver nos jardins!"

Behold us then, with all this growing zeal of our countrymen for our beautiful and favorite art, unable to resist the temptation of commencing new labors in its behalf. Whatever our own feeble efforts can achieve, whatever our more intelligent correspondents can accomplish, shall be done to render worthy this monthly record of the progress of horticulture and its kindred pursuits. If it is a laudable ambition to "make two blades of grass grow where only one grew before," we shall hope for the encouragement and assistance and sympathy of all those who would see our vast territory made smiling with gardens, and rich in all that makes one's country worth living and dying for.

NOTES ON A FEW FRUITS OF SUPERIOR EXCELLENCE.

Such a vast number of new fruits have been introduced into our gardens lately, that the novice is quite bewildered how to choose; and the more experienced cultivator is forced to pause and consider, when asked "which are the best?"

There are, meanwhile, a few sorts which the experience of the last ten years has proved to be so highly valuable that we shall refer to them, in order more particularly to point them out to many whom we know to be still ignorant of their merits.

There is a large class of very fine fruits which have only a *local* value. They belong to a certain small district where they have originated, where their qualities attain the highest perfection, and beyond which they deteriorate. Among such, must be numbered those surpassingly fine fruits, the Newtown Pippin and the Esopus Spitzen-

burgh. Here, where their local origin placed and confines them, they are truly unrivalled. Abroad, in New-England, at the south, and even at the west, they are scarcely the same fruits.

On the other hand, there is a small class of fruits which seem to have a capacity of adaptation that fits them for soils and exposures of almost every character. Hardy, uniformly productive, and thriving in almost every tolerable soil, they become sources of profit to the orchardist, and of continual enjoyment to the possessor of small gardens. To this class belong the following sorts of fruit.

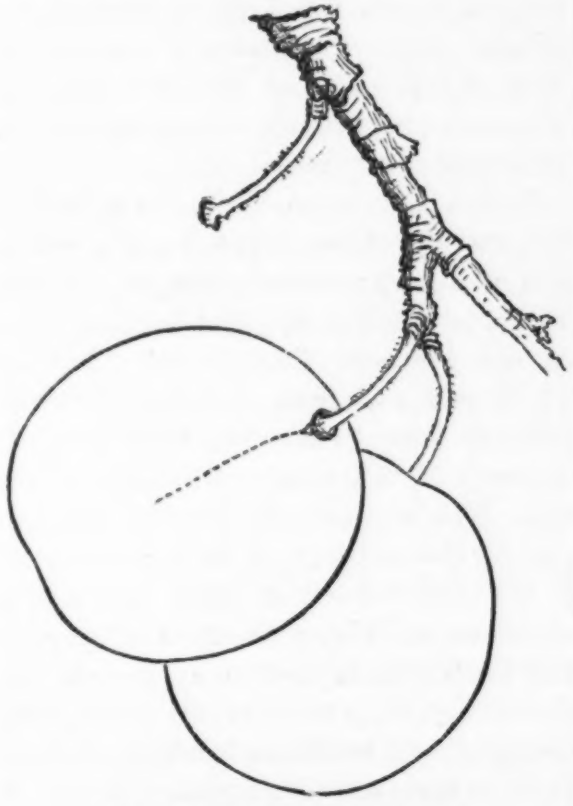

Fig. 1. The Imperial Ottoman Plum.

PLUMS. IMPERIAL OTTOMAN.—This valuable fruit is comparatively little known. It is named, but not described, in the Catalogue of the London Horticultural Society. We believe it was imported from Europe many years ago by the late proprietor of the Linnean Garden at Flushing.

The Imperial Ottoman has qualities which will soon make it a very popular plum. In the first place, it is among the *earliest* sorts, ripening only two or three days after the Morocco. Secondly, it is *remarkably juicy*, sweet and excellent; the flesh of very melting texture. Thirdly, it is a most abundant and very regular bearer; the fruit hanging in the richest clusters. And lastly, it is a very hardy tree—suiting itself to almost any climate, where the plum will thrive.*

The Imperial Ottoman is a fruit of medium size, oval, and regulary formed. The skin is of a pale, semi-pellucid greenish yellow, a good deal marbled. In general appearance, the fruit approaches, somewhat, the Imperial Gage, but the skin is thinner and more transparent. It hangs for some time upon the tree, and though borne in thick clusters, does not incline to rot like some of the finer plums. The stalk and leaves are rather downy, and the former is slightly inserted. The skin is covered with a delicate whitish bloom; and the flesh, when fully ripe, scarcely adheres to the stone.

This plum is yet scarce in the nurseries, and we notice it here, in order to commend it to the attention that it really deserves. It is certainly among the best of the early varieties. The fruit raised in our garden last season, was pronounced by all who saw and tasted it, of very excellent quality.

JEEFERSON.—We have given our opinion respecting this noble plum in our work on Fruit Trees. Every year's trial confirms our high estimation of its merits. We perceive that it is now well tested in England, and equally admired there. Its size, beauty, and delicious flavor, are not its only re-

* Col. Henry Little, of Bangor, too well known for his pomological zeal to need further mention, informs us that it succeeds admirably as far north as Maine.

commendations. Its power of hanging a much longer time on the tree after ripening than any other plum of its class, without rotting or being attacked by wasps, is a point of great value. Wherever it has borne, the testimony is universal that it has on the whole, no superior among plums—and we are proud of its having originated in what must, indeed, be considered the very meridian for the growth of the plum—the upper half of the valley of the Hudson.

There has been an extraordinary demand for the trees of this variety during the past season. We are sorry to learn that in more than one case, the *Bingham* plum has been sold as identical with it. The latter is a totally different *clingstone* variety, and although a good fruit, is in no respect to be compared with the Jefferson.

Crawford's Late Melocoton Peach.—This is unquestionably the most magnificent of all yellow fleshed peaches. Last year afforded abundant additional proof that it is also one of the most profitable of all orchard varieties. We saw baskets of the fruit offered for sale in New-York, from which many specimens would measure nine and ten inches in circumference. As size, and beauty of appearance, tell better than any other qualities in the market, it is not surprising that fine baskets of this sort readily command three and four dollars each, when good peaches of the ordinary kinds were worth only 75 cents per basket. The tree is very vigorous, with handsome foliage, and bears very large and regular crops. It will probably drive the old Melocotons (*Malagatunes*) out of cultivation, as it is in every respect superior to it. It appears also one of the hardier sorts. We have seen specimens of the largest size grown almost without care, as far north as the neighborhood of Boston.

Belle de Choisy Cherry.—Certainly this French variety, from the little village, whose name it bears, near Paris, is one of the most delicious we cultivate. It is of medium size, and is only a moderate (though very regular) bearer. But it is very beautiful with its thin, semi-transparent skin, and of the most delicate and agreeable flavor.

The Belle de Choisy is now very well known among amateur cultivators in most parts of the country. We are glad to learn from various accounts, that it proves to be adapted to a great variety of soils and climates—suiting both the south and the north. This might indeed be predicted from its constitutional habit, which is that of the *Duke* cherries—only one remove from the Kentish or Morello—popularly known as pie cherries—the hardiest of all cultivated cherry trees.

It is a little remarkable, we may here say, that the cherry, which has the reputation of coming originally from Asia Minor, should be found a difficult tree to cultivate in our Southern States. All the finest *Heart* and *Bigarreau* cherries absolutely suffer in many parts of the south from the exposure of their trunks to the heat of the sun. The only remedy that we can suggest for those districts, is to keep the head of the trees low—plant them in northern situations, and *sheath the stems with straw.* The latter will, in most cases, prevent the distension and bursting of the sap-vessels, and splitting of the trunk, to which this tree, in all its more valuable varieties, is subject in such situations.

Pears.—The pears which appear to have risen very highly in the public estimation during the past two seasons, are the Beurré d'Aremberg, the Beurré Bosc, and the Dearborn's Seedling.

The Beurrè d'Aremberg is now almost unanimously acknowledged by our best

cultivators, to be the first of winter pears for this climate. The tree, hardy, uniformly productive, and holding its fruit well; the fruit itself high flavored, maturing perfectly in all situations, and always keeping and ripening admirably; what better character is necessary to place it foremost among select and valuable varieties?

Among autumn pears, the Beurré Bosc proves, year after year, equally deserving of praise. Its branches are regularly laden with large, fair, and beautiful specimens, of a fine yellow, touched with a little cinnamon russet, which ripen gradually, and always attain a delicious flavor. With many sorts of pears, it is unfortunately the case that only one fruit in ten is a really fine specimen. With the Beurré Bosc, it is just the reverse; scarcely one in ten is blemished in appearance, or defective in flavor. It is, in short, a standard fruit of the highest excellence, and worthy of universal cultivation.

Dearborn's Seedling.—This most excellent little pear, raised by Gen. Dearborn of Boston, has scarcely had justice done it. Its merits have been in fact *eclipsed* by the more showy qualities of the *Bartlett*, which ripens but a little later. Indeed, the Bartlett pear, from its unusual productiveness, size, excellence and beauty, as an early fruit, added to its vigor as a tree, and the rapidity with which it comes into bearing, has actually been the object of a sort of mania among those largely engaged in pear planting, within the last three years.

Notwithstanding this, Dearborn's Seedling deserves a place in every garden and every orchard. It is, we admit, not a large pear, but it is one of most excellent flavor, and bears such regular and enormous crops, that its moderate size is amply compensated for by the abundant quantity. As, like most pears, it is always best when ripened in the house, it will bear transportation to market well; and no one who makes an acquaintance with its flavor, will feel inclined to lay it aside for any competitor of its season.

RURAL ARCHITECTURE.

DESIGN FOR IMPROVING AN ORDINARY COUNTRY HOUSE.

No man has it in his power to say when or where he shall be born into the world. He has nothing to do with the conditions of his personal appearance. Whether he shall have the portly figure of John Bull, or the spare one of the walking skeleton; whether he shall be a giant or a dwarf; or belong to the Hottentot, or a Caucasian race; all these are matters over which he has no control whatever. Mankind are therefore forced to accept the conditions of birth as they find them.

But we are not equally obliged to follow the law of necessity in all other conditions of life. A man is not always forced to be meanly clad, like the Esquimaux. He need not always live in a hut or a wigwam, like the Potowatomies. A civilized man will first make his habitation and his outward circumstances comfortable and convenient for all his wants. His reason teaches him to do this. He will then add something of grace and beauty to the objects that surround him;—to his dress—his house—and his grounds. The sense of the beautiful and perfect—attributes of the godlike, im-

planted in every man's heart—(vague and rudimentary though they appear in some,) will as inevitably lead him to this latter result.

Certainly there is nothing that more powerfully affects the taste and habits of a family—especially the younger members of it—than the house in which it lives. An uncouth, squalid habitation, is little likely to awaken that attachment to home, that love of good order, and that sense of propriety and elegance in social deportment, which are so much promoted, so much developed, by that home where a certain proportion, a certain fitness, and a sense of beauty, are every where visible.

It is not necessary to these conditions, that wealth should always be present; a log hut may, in its way, be made as tasteful as a palace. *Only is it needful that the mind should be alive to the superiority of a good form over a bad one*—that we should feel the mental pleasure of fitness, and the mental pain of clumsiness—in short, that we should be susceptible of the enjoyment of beauty, whether in the rainbow, the sunshine, smiling fields, or rural cottages and gardens, at least as constantly and strongly as we feel the mere animal pleasures of eating and drinking, sleeping and walking.

It will therefore be part of our duty in this journal, to explore further, from time to time, this field of progress, in the taste of rural dwellings, in which we have already labored.

It is not every man's fortune who lives in the country, to build a tasteful house for himself. Some care nothing for the form and appearance, so that there are rooms to live in, and a roof to cover them. Others have had no models to study, no works or architects to consult, and no capacity to design an agreeable dwelling.

There is a still larger class—those who have bought or inherited a house which is too good to be sacrificed, and yet so devoid of every thing pleasing, that it does not satisfy a mind the least cultivated.

Such a house may be *altered*. Its whole character may be changed; and this frequently at a small cost, compared with that of building a new one. As we find the owners of the great numbers of houses of this class, are desirous of having suggestions for such alterations and improvements, we shall occasionally introduce examples of this kind, as well as those of a more distinct and original character.

In *figure* 2, (see frontispiece,) is seen a building that our readers will recognize at a glance, as the portrait of a plain country house, common in almost every neighborhood. Whilst there is perhaps nothing mean in the expression of this house, neither is there any thing in the least tasteful, or above the character of *common-place*. It belongs to the large class of dwellings whose presiding architectural genius is that of the "*bare and bald*."

In *figure* 3, is seen our proposed alteration and improvement of this house.

In the first place, to give spirit and character to it, we have boldly projected the roof, and ornamented the eaves. To give expression to the tame line of roof, we have added a small gable in front. The window pierced in this gable, will serve to light and render useful an additional room in the garret. For the meagre and insufficient porch, we have substituted a veranda ten feet wide, along the whole front; the shade and comfort of which in summer, makes it at least equal in value to any room in the house.

A part of the roof of this veranda, viz: that portion under the shadow of the gable, is finished with a tight sealed floor, so as to form an agreeable balcony to the central

window of the front. The windows themselves, (though this is not so important,) we should prefer to change from the common form, to that of the more expressive and cottage-like *latticed sash*, as shown in the engraving.

We think no one can compare these two buildings without confessing that the alteration confers a character of taste and picturesqueness on what was before a very ordinary and insipid building. The improvement does not involve any material change in the body of the house itself, but merely in those external parts easily altered and added to.

Let us add a few words on the details themselves, that we may be the better understood. The roof should project two and a half feet all round the house. This projection is easily made by taking off the siding directly under the eaves of the old roof—introducing pieces of joists as rafters; upon which, carry out the rafter boarding, and piece out the roof to the necessary breadth.

The verge boards, or eave boards, (i. e. the ornamental piece running round below the outer edge of the roof,) must be cut out of sound *two inch* plank. It is the besetting architectural sin of half the carpenters in the country, (and more especially those in New-England,) to make these portions of a rural cottage of *thin boards*. Nothing gives a cottage, otherwise good, such a rickety, *paste-board-ish* air. The spirit of the carvings and ornaments of the gothic villa, of which these cottages are modified forms, is that of elegant solidity—not "*gingerbread*" flimsiness.

The supports of the veranda are simple solid posts or columns, six or eight inches in diameter, left square for base and capital, and hewn to an octagon in the shaft. The arch which runs at the top, from one to the other, is cut from two inch plank.

Nothing is heavier and less agreeable than the common square chimney. We would therefore advise the owner of *figure* 2, to complete the alteration by adopting the simple form of carrying up distinct flues, standing on a common base, and connected at the top, as we have shown in *figure* 3. The expense is but little more than in the common mode, and the effect far lighter and more agreeable.

ESTIMATE.—The cost of the proposed alteration of this house, will vary from $400 to $700. The cost of lumber and of the mechanic's labor, varies so widely in the different States, that it is impossible to give an estimate which will be an accurate one, for any two sections of the country. Where we write, the whole could be completed in a workmanlike manner, for about $550.

THE TWO NEW ORNAMENTAL TREES.

Two new ornamental trees have lately made their appearance in our gardens, which are attracting the attention of all amateurs. They both appear to be quite hardy in this latitude, and will undoubtedly add greatly to the beauty of our lawns and plantations. These are the *Paulownia*, and the *Deodar Cedar;* the former, a fine deciduous tree, with the general habit of the Catalpa; the latter, a noble evergreen, with the grand character of the Cedar of Lebanon. Some account of each of these trees may be acceptable to our readers.

The Imperial Paulownia is one of the plants lately brought to Europe from Japan, by Dr. Von Sieboldt, the Belgian botanical

traveller. In its native country its local name is *Kirri;* and the Chinese call it *Tso-Hak-Tso.* It forms a tree, in Japan, about 30 or 40 feet high, with a trunk two or three feet in diameter. The bark is smooth and light colored. The branches are rather few in number, spreading horizontally and forming a large head.

Fig. 4. THE PAULOWNIA.

Paulownia imperialis. Sieboldt & Zucc.
Schrophulariaceæ. Lind. Veg. King.

The striking peculiarity of the Paulownia, however, is its showy foliage. The leaves are of the shape of those of the Catalpa, but of a darker green, perhaps resembling more closely those of a large sunflower—being broad and heart-shaped. In rich soil, the growth of the tree is extremely rapid—young plants making shoots of 8 or 10 feet in a season, and on such, we have measured leaves a foot and a half in diameter. But on older trees, they are usually about half that size.

The flowers are produced in April, in panicles, at the ends of the branches. They resemble in general appearance those of the Catalpa, but the color is a pale bluish-violet. The seeds are borne in an oval capsule as large as a pigeon's egg.

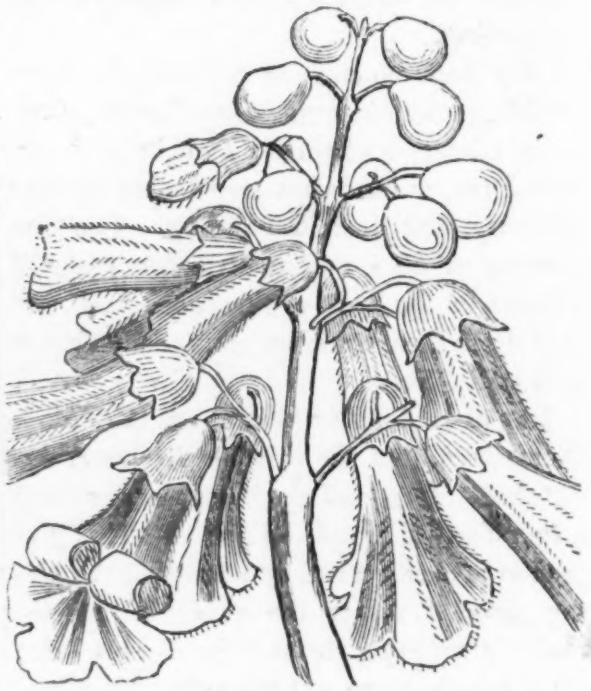

Fig. 5. *Blossoms of the Paulownia,* 1-4th *the natural size.*

When the Paulownia was first introduced into the Garden of Plants at Paris, it was treated as a delicate green-house plant. It was soon found, however, that it was perfectly hardy on the Continent and in England. In this country it appears equally so. The trees in this latitude have stood the past two winters, even in exposed situations, without covering, and have not lost an inch of the previous season's growth. We therefore consider it a hardier tree than the Catalpa, which often suffers badly from the cold of this latitude. Nothing is easier than the propagation of this tree. Single buds will grow, like those of the Mulberry and the Vine, taken off early in the spring and covered about an inch deep in the soil of a fresh hot bed. The cuttings of the young shoots, planted under a hand-glass in a shady border, strike root readily But by

far the easiest and most rapid mode is that of planting pieces of the roots.

Every little piece of the root of the Paulownia will, under certain conditions, produce a plant. It is only necessary to make a common hot-bed early in the spring, reduce the roots of the parent tree, (and it will bear a very severe reduction,) and plant every piece that will make a cutting not smaller than a goose-quill, and a couple of inches long. Plant these bits of roots about an inch and a half deep in the rich, light s il of the hot-bed. In a fortnight's time, every bit will throw up a bud, make new roots, and become a distinct plant. When the plants are about three inches high, they may be transplanted into rows, beds, borders, or, in short, wherever they are finally to grow. If the season is favorable, they will grow to the height of from three to six feet before the close of the autumn. Next year, if the soil is deep, they will make shoots eight or ten feet long.

When the Paulownia was first offered for sale in Europe, about three years ago, it was advertised by the Brothers Baumann, the great nurserymen of the Rhine, at from three to six *guineas* per plant. From the rapidity with which the nurserymen are propagating it now, in this country, we have no doubt it may be bought next autumn at wholesale, at about the same price per hundred trees.

The parent tree, in the *Jardin des Plantes*, Paris, has already borne seeds in considerable quantity, which have vegetated very regularly. The tree has not yet, to our knowledge, flowered in this country, but will probably do so next spring. As soon as the seeds are produced in abundance, we advise cultivators to resort to them—the best of all modes of propagating ornamental trees—when it is possible to do so.

THE DEODAR CEDAR.

Cedrus Deodara. Roxburgh.
Pinaceæ. Lind. Veg. Kingdom.

The Deodar Cedar is the glory of the Himalayas. Bishop Heber describes it in one of his letters as "a splendid tree, with gigantic arms and dark narrow leaves, which is accounted sacred, and chiefly seen in the neighborhood of ancient Hindoo temples, and which struck my unscientific eye as very nearly resembling the Cedar of Lebanon. I found it flourishing at nearly 9,000 feet above the level of the sea, where the frost was as severe as in England." *Deodara* or *Devedar*, is the local name in the Hindoo country, and signifies *Tree of God.* It is used there as the incense fuel; but is also considered one of the most valuable sorts of Indian timber. In the Penny Cyclopedia, it is stated that specimens were taken from a bridge in Ladak, where they had been exposed to the water for 400 years.

Of course, the Deodar Cedar will only be interesting to our readers as an ornamental tree. Specimens are growing at this moment in many collections in this country; and so far as we learn, it is perfectly hardy to the southward of this latitude, though liable to be injured by the winter at the north. South of New-York, it will certainly form one of the most beautiful of ornamental trees.

The general habit of this tree, as has been already remarked, is that of the Cedar of Lebanon, which it most nearly resembles. Its foliage, however, is larger, of a lighter, more silvery hue, and the branches have more of a drooping habit and more feathery lightness than the Cedar of Lebanon. The fact that it grows much more rapidly, will serve as an additional recommendation to the lover of fine trees.

This is still a very rare tree. There are

Fig. 6. *The Deodar Cedar.*

yet no specimens in America over a few feet in height. The accompanying portrait is from the Annals of Horticulture, and represents an English specimen about ten years old. We add the following note from the same work:

"The cones of this tree resemble those of the Cedar of Lebanon, and are ripe in the months of November and December, when they fall off like the Silver Fir cones. They may be crushed into pieces even with the hand, and the seeds are then easily picked out; the good ones are plump, whilst those which are useless, are flat and shrivelled. During the month of May, a light friable piece of ground should be selected, (and in the climate of England it will be all the better to be shaded,) and after being dug and raked, the seeds should be sown in beds in the same way as Larch seeds are sown, viz: by covering them to the depth of two-thirds of an inch. The plants will appear in June, and in those beds they may be allowed to remain two years, keeping them free from weeds; they should then be transplanted into lines, and treated in every respect the same as the common Larch tree. The system of keeping them in houses is just as absurd as growing the common Scotch Pine in heat, or any other plant which is equally hardy."

THE BEST FIVE WINTER PEARS.

BY THE PRESIDENT OF THE MASSACHUSETTS HORTICULTURAL SOCIETY.

Mr. Downing—You ask me for the results of my experience as to what I consider "*the best five varieties of winter Pears.*" I comply at the spur of the moment. I regret that at the present time my engagements will only permit of devoting the passing hour to the subject, and will necessarily compel me to pass more hastily over it than I could wish, for one of its importance. The list, however, is made up from many years' experience with the varieties named; all of which, I can confidently recommend as worthy of extensive cultivation. For more particular descriptions than will be found in the following remarks, reference may be had to the various Pomological works of the day. I commence with that "Prince of Pears," the

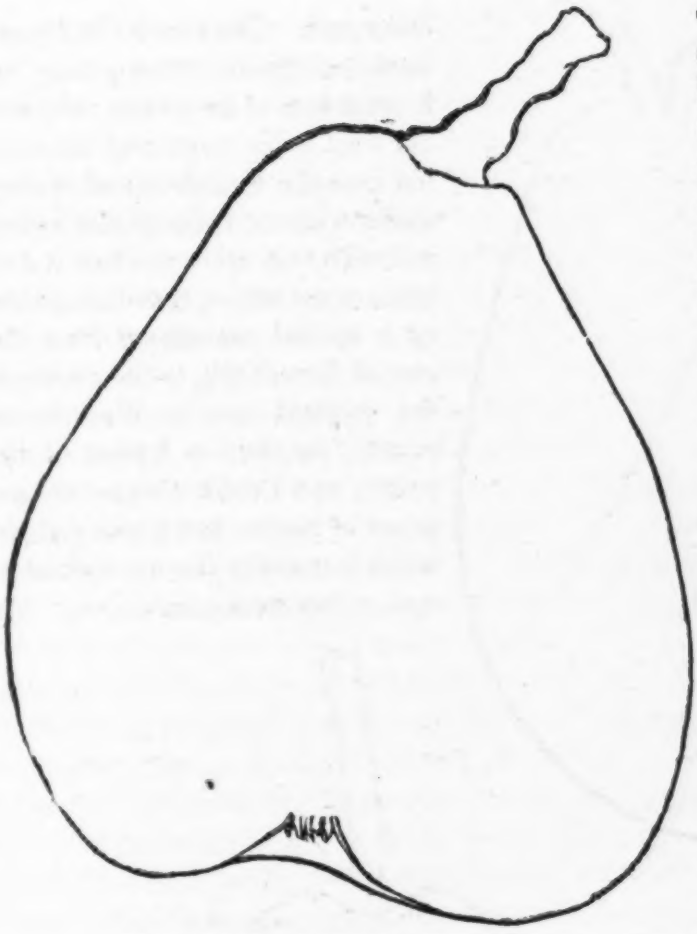

Fig. 7. *The Beurré d'Aremberg.*

1. Beurre d'Aremberg.—This variety has, for the last ten years, never failed to yield me an abundant crop of its delicious fruit. It has as often been exhibited at the rooms of the Massachusetts Horticultural Society, always receiving the unqualified approbation of our most experienced amateurs and cultivators. Possessing all the characteristics of a first rate table pear, it retains at maturity, its flavor and *champagne* sprightliness, with all the freshness of a specimen just plucked from the tree. The foliage and fruit adhere with a remarkable tenacity, resisting the frosts and gales of autumn better than those of most other varieties. As a constant, prolific, hardy sort, the d'Aremberg is unsurpassed, and whether on the pear or quince stock, proves admirably adapted to this climate. It keeps as well as a Russet apple, and requires no further care than to gather in a dry day, and pack at once from the air, in close boxes or barrels—with no other precaution, it has been found in a state of perfect preservation in the month of January. Season, December to February. The Beurré d'Aremberg is a fruit easily excited to maturity, and may be brought into eating in November, or retarded until March.

2. Winter Nelis.—This is classed second in my list, not from any inferiority to the first named variety; for in fact, as a sweet, melting winter pear, it has no equal. Connoisseurs generally prefer the brisk,

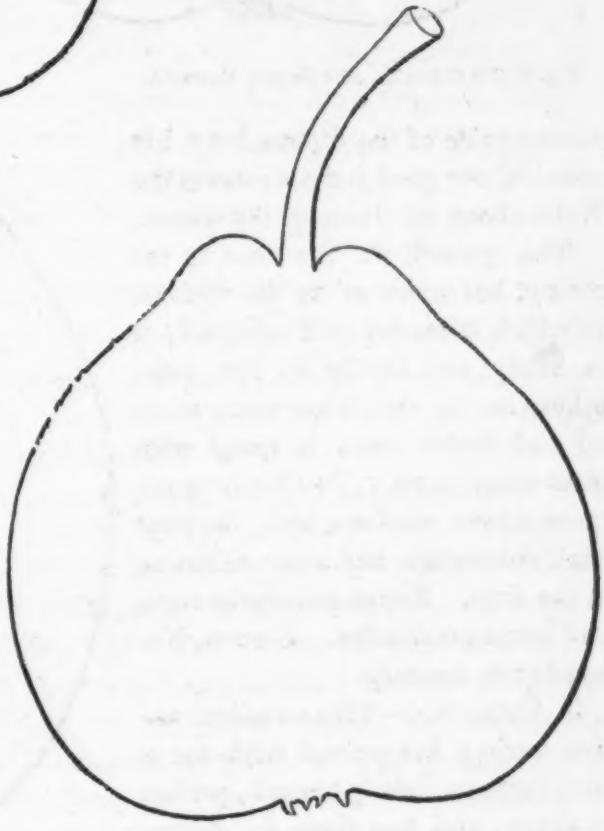

Fig. 8. *The Winter Nelis.*

Fig. 9. *The Columbia, with the stem shortened.*

vinous juice of the d'Aremberg, but some of our good judges esteem the Nelis above all others of the season.

The growth of the tree is not strong, but more so on the quince, to which it seems well adapted; it is hardy and thrifty in rich soils, otherwise the shoots are more stinted and feeble than is usual with most other sorts. To obtain specimens above medium size, requires high cultivation and some thinning of the fruit. Keeps and ripens well, and bears good crops. Season, November to January.

3. COLUMBIA.—This excellent native variety has proved with me a fruit more uniformly smooth, perfect in shape, and free from the depredations of insects, than almost any other sort. The tree is thrifty and hardy, not prolific when young, but a great bearer on mature subjects, the fruit being regularly distributed over the branches, and of very uniform size. I was so much pleased with this variety when it first came to my notice, that I despatched a special messenger from the city of New-York, to the owner of the original tree in Westchester county, for half a bushel of the pears; and I did not regret the expense of twelve and a half dollars, when I consider the acquisition of such a fine American variety. My

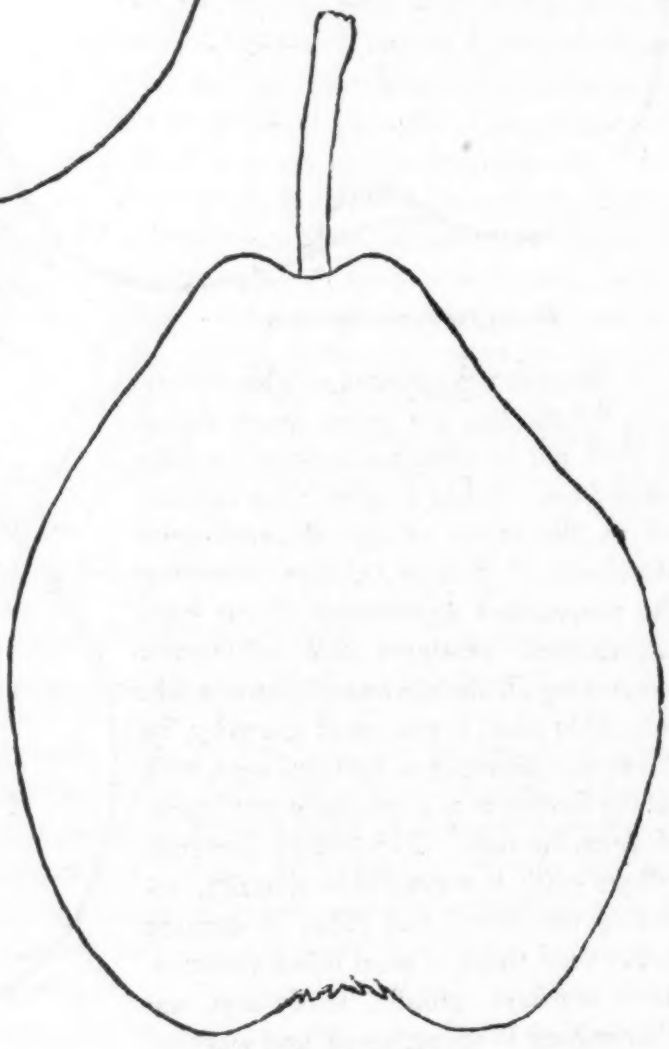

Fig. 10. *The Glout Morceau.*

Beurré Diels were then in eating, and I judged the Columbia of equal quality; since which, however, I have seldom seen it so good. Ripens about the first of January; of a clear lemon yellow, very handsome, and may be kept two or three weeks in this state. Its beauty will give it a ready sale, and its quality and its merits, on the whole, if not as high as our first impression, will prove perfectly satisfactory.

4. Glout Morceau.—This pear, under the name of Beurré d'Aremberg, is more universally cultivated in France, as a winter fruit, than any other variety. It is truly an excellent, rich, sugary pear, and is not unworthy of the appellation given it. The tree is hardy, a great and constant bearer; but it requires, like most pears, good cultivation. Few varieties succeed so well on the quince, as the Glout Morceau; a tree of which, in my own ground, annually produces a barrel of large perfect fruit; this is clear waxy yellow, and very handsome at maturity; keeps into the winter months, with ordinary care; commands as good a price in the market, and is esteemed by many, equal to the Beurré d'Aremberg. It varies much in form. In growth, it is more luxuriant on the *quince;* the large specimens frequently having a very thick, short stem, set angularly on the fruit, with the peculiar knobby appearance of the d'Aremberg. On the *pear stock*, and under medium cultivation, the stem is smooth and straight, as figured by Thompson in the Gardener's Chronicle, and Downing in the Fruits and Fruit Trees of America. From this circumstance, the present subject has been confounded with the Beurré d'Aremberg. Season, December and January.

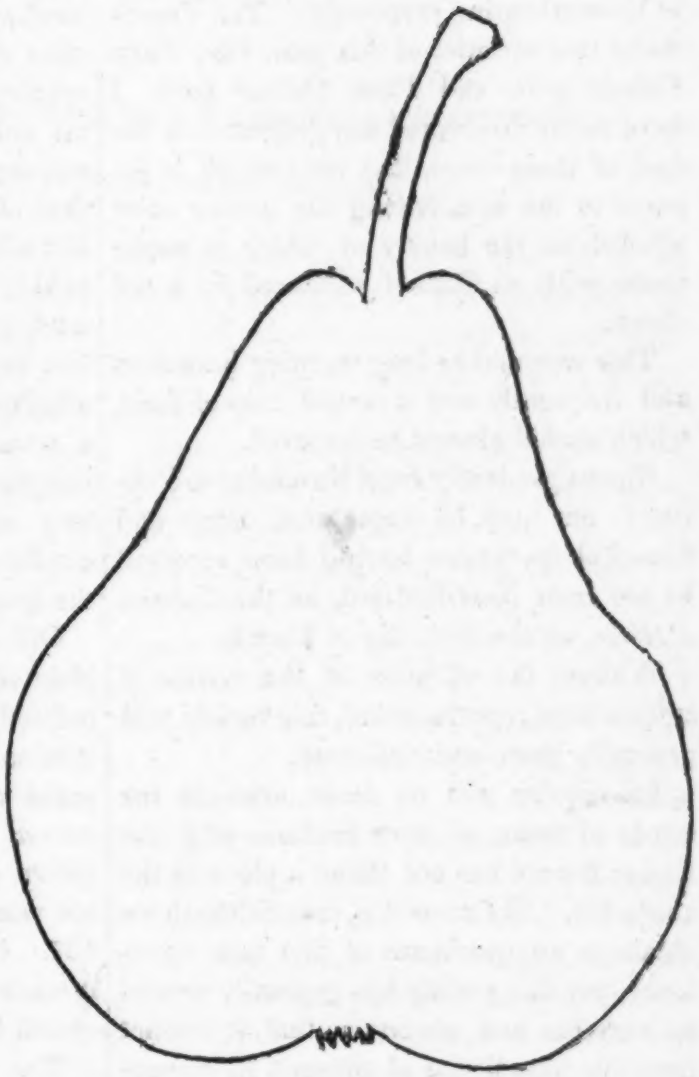

Fig. 11. *The Passe Colmar.*

5. Passe Colmar.—As a hardy, vigorous, excellent pear, the Passe Colmar has few superiors. It is prolific to a fault, and requires judicious management. To insure fruit corresponding to its character in the Catalogue of the London Horticultural Society, "first size, and first quality," it is necessary to commence the trimming process as early in the season as the best specimens can be distinguished, or the pruning out of half the fruit bearing spurs in the month of March, as recommended by the late Mr. Manning, will contribute to relieve the tree

of its overbearing propensity. The French make two varieties of this pear, viz: *Passe Colmar gris*, and *Passe Colmar doré*. I have never discovered any difference in the fruit of these trees, that only which is exposed to the sun, having the golden color alluded to, the beauty of which is sometimes with us further enhanced by a red cheek.

This tree makes long weeping branches, and frequently sets a second crop of fruit, which should always be removed.

Ripens gradually from November to February, but may be kept later, large and beautiful specimens having been received by me from New-Bedford, as the *Colmar d'Hiver*, on the 18th day of March.

Without the adoption of the system of culture here recommended, this variety will generally prove unsatisfactory.

An inquiry will no doubt arise in the minds of some of your readers, why the Easter Beurré has not found a place in the above list. My answer is, that although we obtain some specimens of first rate excellence, yet this variety has generally proved so variable and uncertain that it cannot from our experience at present, be recommended for general dissemination. It however succeeds better on the quince.

Respectfully yours,

MARSHALL P. WILDER.

Boston, June 1, 1846.

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REMARKS.—If our pomological readers, and the novice just commencing a fruit garden and orchard, attach any importance to *experience*, and the simple results of the best *practice* in the country, then they may look upon the foregoing article by Col. Wilder, as one, every word of which is of sterling value. In all our various examinations of the orchards and gardens of this country, we have no where seen the general cultivation of the pear more entirely successful than in the garden of the President of the Horticultural Society of Boston. But what is of far more consequence to the public, is the fact that, unlike many amateurs whose sole delight seems to be to collect and retain possession of *every thing*, whether good, bad or indifferent, that bears a name, our correspondent exercises his judgment and his reason in openly repudiating sorts of poor quality, and bearing a candid and impartial testimony in favor of the few sorts really good.

Our readers will notice that under the head of Glout Morceau, Col. Wilder has pointed out the cause of the variety of opinion as to the form of that pear, as compared with the Beurré d'Aremberg. The *normal* form of the Glout Morceau when grown on a pear stock, is that figured in our work on Fruits and Fruit Trees, page 437. Often when grown on a *quince* stock, it takes the figure of the d'Aremberg, as shown by Mr. HOVEY in his Magazine.

The flavor of the two fruits, and the growth of the respective trees, however, distinguish them perfectly at all times. The Glout Morceau is a pear of sweet and honeyed flavor, like the Doyenné or St. Michael; the Beurré d'Aremberg of vinous flavor, a rich mingling of sugar and acid, like the Brown Beurré, or in its own perfection, more like a Pine-apple. Again, the spreading, depending shoots of the Glout Morceau, and its somewhat wavy leaves, mark the distinctness of the tree at a glance, from the more erect habit of the Beurré d'Aremberg.—ED.

THE AMERICAN ARBOR VITÆ FOR SCREENS AND HEDGES.

BY THE FOREMAN AT THE HIGHLAND GARDENS.

Every one having the care of grounds in the country, is aware of the want of some good, rapid growing, evergreen plant, for screens and for hedges—something to hide unsightly objects, and to serve as a kind of thicket between one part of a place and another. Unfortunately, in this climate, the Hollies, Portugal Laurels, and other beautiful evergreens of Europe, will not succeed. But there is one native evergreen, which stands admirably in their place, making the most perfect screen, and with the least possible care and trouble. The undersigned, therefore, proposes to offer a few remarks on its merits to the readers of the Horticulturist.

In the first place, he would remark, the ease and success with which it may be transplanted. When grown in loose nursery ground, where it can be taken up without injuring the roots badly, not one in one hundred, ever fails; and even in its native localities, when taken up with ordinary care and kept damp, and covered from the sun and drying winds until again planted, the failures are in general very few.

In the next place, the little care required in its after management, or in other words, the *no care at all* required—unlike the evergreens of Europe above spoken of, which require such frequent pruning and trimming, to keep them in shape. One of the finest screens the writer ever had the pleasure of seeing, is one of this kind growing here. The plants have never had a shears or knife applied to them for the purpose of pruning or trimming, since they were first set out: this is now 12 or 15 years. The screen is now 16 or 18 feet high, and almost as symmetrical and regular as if clipped annually with a hedge shears.

Another superior qualification possessed by the native Arbor Vitæ, is its freedom from disease, or tendency to decay—in many hedge plants, and even the Red Cedar, some of the hardiest branches, and occasionally whole trees, die off without any apparent cause; neither does it ever suffer from the effects of winter, like the Chinese Arbor Vitæ, and many other plants. It is a fact that such a thing as a dead tree or branch is never seen, even in its native localities, unless broken or injured in some unfair manner; add to this, that insects never attack it, and its longevity is very great. Another character peculiar to the Arbor Vitæ is, that in summer, when many evergreens look brownish, compared with the foliage of some of the deciduous trees, its beautiful verdure will not suffer in comparison with the most lively green of June foliage.

The foregoing remarks have reference to the American Arbor Vitæ as a screen plant. But as a hedge plant, its claims are even greater, one qualification only lacking, that is not being sufficiently impervious, in localities where the quadrupeds, and even bipeds, are not sufficiently *domesticated;* even in such localities, depredations from the former may be prevented, by having a low, cheap board fence, or what would be much better, if the beautiful and cheap wire

fence, so much used in England, were introduced among us more, which does not mar the beauty of the hedge, and at the same time answers the purpose of protection. With either of the above precautions, the Arbor Vitæ may be made to answer every purpose as a hedge plant; the expense and trouble in keeping Hawthorn and such hedges, free of weeds, and the frequent use of the hedge shears, not required in the after management of the Arbor Vitæ, would more than balance the expense and trouble of the protection required by the latter, in localities exposed to much trespass. Finally, its exemption from all the pests that prey upon the Hawthorns, such as borers, aphis, blight, &c. &c., and its being an evergreen, which is not the case with the Cratægus, Gleditschia, Maclura, &c. &c., renders it incomparably superior to any other plant for this climate, as an evergreen hedge plant.

A. Saul.

Highland Gardens, Newburgh, June, 1846.

.....

Remarks.—The Arbor Vitæ of this part of the Hudson river, is so distinct in its habit, and so peculiar in its symmetrical growth, that we are more than half inclined to think it a distinct variety. It forms, without any pruning, a regular, conical tree, of from 10 to 30 feet high, feathered thickly with branches quite down to the ground. Certainly nothing can well be more perfect or beautiful, than a well grown hedge or screen of this tree. We look upon it as standing at the head of all *evergreen* hedge plants for this country; as we do upon the Buckthorn (*Rhamnus catharticus*,) as the very best of *deciduous* plants for our use.—Ed.

Some Account of the Origin of the Boston Nectarine.

BY SAMUEL G. PERKINS, BOSTON.

[The following account of the origin of this very handsome fruit, we extract from a letter from our veteran horticultural friend, S. G. Perkins, Esq., a gentleman for whose profound practical knowledge, especially in all that relates to the culture of fruit trees, we entertain the highest respect. He who wishes to see the *espalier* culture of fruit carried to its highest perfection, in a way, too, the most rational, simple, and unexpensive, can no where pass so instructive an hour, as in the garden of this gentleman, in that most beautiful of all suburban neighborhoods, Brookline, near Boston.—Ed.]

.....

This fruit—the Boston, [or Lewis, or Perkins' Seedling, as it is often called] I obtained from Mr. T. Lewis of Boston—in whose yard it was produced, from the kernel of a peach stone, as he and his mother both informed me, they, at the time it first bore fruit, never having seen a Nectarine. Mr. Lewis, as the tree came forward, always supposed it would produce what is called a peach; but on seeing, when it first appeared, this beautiful fruit, with a smooth skin, was impatient to know what it was, and carried it to the late Mr. S. Pomeroy, who was then the leading cultivator of fruits in this region. Mr. Pomeroy brought it to me, for although he knew it to be a Nectarine, he had never seen any so large, and as I then had the Red Roman in perfection, he wished to compare it.

I immediately obtained buds from the tree for Mr. Pomeroy and Mr. Preble, as well as myself. All these failed—mine alone being preserved. The original tree

from which they were taken, was unfortunately soon after destroyed by boys—plunderers of the fruit. It was purchased the same season by the gardener of Gardiner Green, Esq., who paid fifty dollars for it as it stood. To protect it, he immediately built a fence high enough, as he supposed, to prevent the boys from reaching the fruit. It had the contrary effect—attracted their attention, and they pulled down fence, fruit and tree—totally destroying the latter, so that the only shoot of it living was in my vinery. From this tree in my vinery, I raised fruit for nearly 20 years, but I had also others coming forward.

In 1821 or 1822, I sent one or two trees to the Horticultural Society of London, of which I was a corresponding member. I also sent them a painting accurately representing one of the Nectarines, *that measured eight and a half inches round.* The fruit represented was so superb, that they doubted its being a correct portrait, until it had borne fruit in their own garden. If you are in our neighborhood in the early part of August, I shall be happy to show you three trees now in fruit, covering 55 feet of my wall, as firm and as beautiful as that represented in the painting sent to the Horticultural Society of London. These trees are all of them seedlings of my own raising, and are quite the same as the original tree, the Lewis, the Perkins' Seedling, and the Boston, being all the same fruit, differently called in various places. The name Boston was given by the Horticultural Society of London.

With regard to the original tree found in Mr. Lewis's yard, I have no doubt that it was really the product of a peach stone; for we know very well that such instances are on record, and that a Nectarine is nothing more than a *smooth skinned* peach; the stone of a downy peach may produce occasionally a peach without down.

Respectfully yours,

SAMUEL G. PERKINS.

Brookline, near Boston, April, 1846.

A Preventive to the Mildew in the Gooseberry.

BY NEW-JERSEY

DEAR SIR—Almost every body is discouraged with trying to raise the Gooseberry in this country, on account of the *mildew* or *rust*, which destroys the fruit. I have made a good many experiments for the last 15 years, to find out, if possible, some simple mode of preventing this, but entirely without success, until three years ago, I hit upon a mode which has given me great satisfaction in growing this fruit.

My mode of preventing the mildew, is very simple. It consists in covering the soil under the bushes with salt hay about three inches thick. This should be done early; say when the blossoms begin to open. Whether it acts as a shield to preserve the roots, and thereby the whole system of the plant, from the sudden changes of weather, which the scientific say bring about the mildew, or whether it acts as a stimulant, I am not able to say.* It is sufficient for me that I have never had the least appearance of mildew under the bushes which I have treated in this way, since I began to apply it; while others in the same

* The salt does not, we think, act *specifically* in preventing mildew; as we have tried it, spread upon the soil, with no effect. Yet we have heard such good accounts from several persons this season, of this very mode of using salt hay, that we think very favorably of it, and recommend it for trial.

garden have been totally covered with it. I leave the salt hay on all summer. By autumn, it is pretty well rotted, and I then dig it in, and it promotes the growth of the tree next year.

If you think this simple mode of preventing mildew, which I have found so successful, will interest your readers, I shall be glad to have it made public in the Horticulturist. NEW-JERSEY.

Notes on the "Black Fig" of the Azores: Culture of the Fig under Glass.

BY JOHN FISK ALLEN, SALEM, MASSACHUSETTS

[HAVING heard of a very prolific and excellent new Fig, grown by J. F. ALLEN, Esq., of Salem, Mass., we requested that gentleman, one of the many zealous gardening amateurs in that city, to favor us with something of the history of this variety, to which he has very kindly added some interesting notes on the culture of the Fig, for the benefit of our readers.

Mr. Allen had the goodness to send us some plants and ripe specimens of the "Black Fig," which we found of medium size and excellent flavor. Annexed is a drawing of one of the fruits, from the latitude of the Azores: we should be inclined to give this sort a trial in the open air in this latitude.—ED.]

.....

The Fig I cultivate, was imported from St. Michael, Azores, in 1836, under the name of "Black Fig;" how it came into the Island, or from whence, is not known. It has been grown there at least, for as long a time as is within the memory of one of the oldest residents of the Island. When received by me, the original tree was in a tub, and remained in it for two or three years, ripening ten to twenty fruit each season. It was then planted on the back wall of a green-house, and trained horizontally; it grew rapidly, and has yearly ripened from two to five hundred fruit. The first crop, which is the least, comes on in March

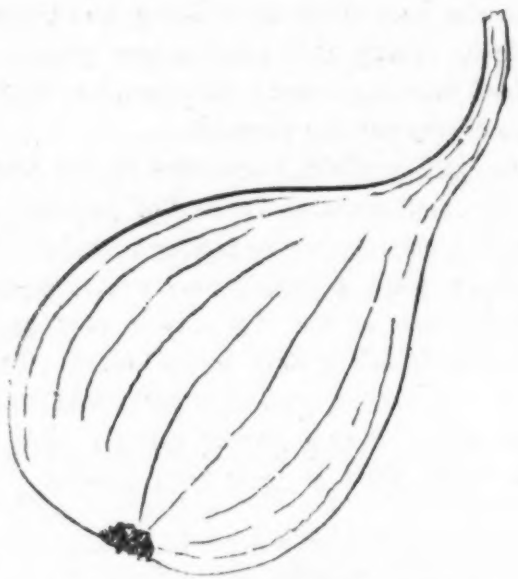

Fig. 12. *The Black Fig of the Azores*

and April; the second and third, the chief crop, and best in quality, from 20th May to 1st July; ripening every two or three days ten to twenty. This house is used for forcing grapes, which forcing is commenced 1st of December, and the rafters are covered with vines, which ripen the grape from April to June; the tree, after winter pruning, covers the wall 10 feet in height, and 10 feet in width. At the present time, June, 10 feet high, and 18 feet wide, and has not less than 400 fruit, in all stages, on it.

CULTIVATION OF THE FIG UNDER GLASS.—The fig is very easily grown; it requires a good, rich, strong soil in a moist location. It

is a gross feeder and strong grower, and it succeeds better than any other fruit, on the back wall of a grapery, not minding the shade of the vine. The second and third, or principal crop, is produced on the current year's wood. To produce fruit, the wood does not require to be well ripened, as does that of the grape; but as soon as the shoot has made 12 to 18 inches growth, and the leaf is well expanded, the fig pushes from this new wood at the eye, formed at the foot-stalk of the leaf. The first crop of figs appear thickly over the last year's wood, but there being no leaf to perfect the fruit, it mostly drops or ripens imperfectly—a few only of those favorably situated, ripen well.

Fig. 13. *The tree at the end of the first year.*

The growth of the tree should be encouraged by training, nearly upright, the shoots,

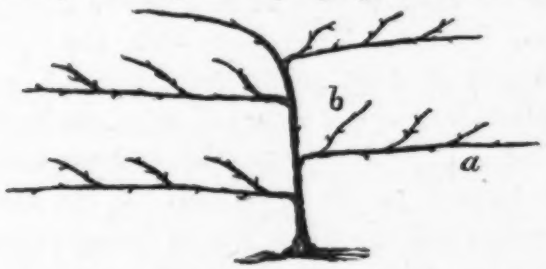

Fig. 14. *The tree at the end of the second year.*

the first season, and other shoots in after seasons, until you have the wall covered sufficiently. The second season, the last year's shoots should be trained horizontally (*a*) to make the eyes push the bearing spurs, (*b*) for on these you are to get your main crop. Lay those in, as soon as they are long enough, and the fruit will soon appear. At the winter pruning, stop the leader as far back as you think best, say at *e*, and cut in all the bearing wood or spurs, to one inch or more, (see cross cuts *f*, *f*,) using your judgment as to the proper spot; making sure there is an eye to start.

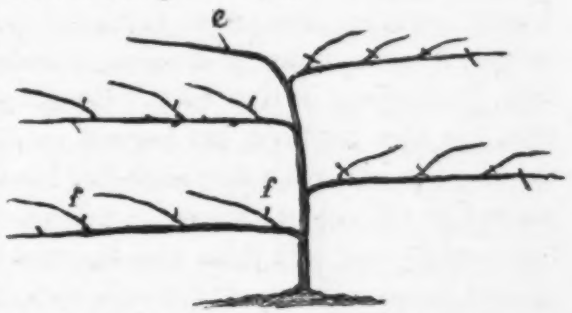

Fig. 15. *The tree at the end of the 3d year, showing how it is to be trained.*

The *scale* is the most troublesome insect on the Fig. To keep it under, the wood, after winter pruning, must be covered all over with a composition made of soft soap, wood ashes, and a small quantity of tobacco water; the latter, made by steeping in hot water. Put the whole on cool, about the consistency of cream.

In tubs, under the vines, in a grapery, a fair crop may be had, if proper care be taken to water occasionally with liquid manure; always remembering that *if the Fig suffers a check for want of food or moisture*, it will certainly drop its fruit.

Fruit in Massachusetts.—The town which raises the greatest *quantity*, is Wilbraham, Hampden county, amounting to 51,832 bushels. West-Cambridge, next, raisos 50,-240 bushels. Then follows in course, Danvers, Newbury, Hopkinton and Roxbury. As far as *value* is concerned, Brookline stands first, being $37,840; West-Cambridge, $25,175; Watertown, $20,000. Nearness to market may affect materially the value of fruit; and fine, or very early varieties, may sell for ten times as much as ordinary kinds.

HOW TO RAISE "GIANT" ASPARAGUS.

BY T. B., NEW-YORK.

Mr. Editor—There are sold in the seed-stores, several sorts of Asparagus, which claim to grow to unusual size, and produce giant stalks. I have bought and planted these sorts, and have found them not perceptibly different from the common old sort.

I want to tell you and your readers, if you will have a little patience with me, how I grow common Asparagus, so that it will always rival any giant production, whether from Brobdignag or Kentucky. Every one who has seen my beds, has begged me for the *seed*—thinking it a new sort—but I have pointed to the *manure heap*—(the farmer's best bank)—and told them that the secret all laid there. The seed was only such as might be had in every garden.

About the 1st of November—as soon as the frost has well blackened the Asparagus tops—I take a scythe, and mow all close down to the surface of the bed; let it lie a day or two, then set fire to the heap of stalks; burn it to ashes, and spread the ashes over the surface of the bed.

I then go to my barn-yard; I take a load of clean, fresh stable manure, and add thereto, half a bushel of hen-dung; turning over and mixing the whole together, throughout. This makes a pretty powerful compost. I apply one such load to every twenty feet in length of my Asparagus beds, which are six feet wide. With a strong three pronged *spud*, or fork, I dig this dressing under. The whole is now left for the winter.

In the spring, as early as possible, I turn the top of the bed over lightly, once more. Now, as the Asparagus grows naturally on this side of the ocean, and loves salt water, I give it an annual supply of its favorite condiment. I cover the surface of the bed about a quarter of an inch thick with fine packing salt; it is not too much. As the spring rains come down, it gradually dissolves. Not a weed will appear during the whole season. Every thing else, pig-weed, chick-weed, purslane, all refuse to grow on the top of my briny Asparagus beds. But it would do your eyes good to see the strong, stout, tender stalks of the vegetable itself, pushing through the surface early in the season. I do not at all stretch a point, when I say that they are often as large round as my hoe handle, and as tender and succulent as any I ever tasted. The same round of treatment is given to my bed every year.

I have a word to say about *cutting* Asparagus, and then I am done. Market gardeners, and I believe a good many other people, cut Asparagus as soon as the point of the shoot pushes an inch or two through the ground. They have then about two inches of what grows above ground, and about four or six inches of what grows below. The latter looks *white* and tempting; I suppose people think that for the same reason that the white part of Celery is tender, the white part of Asparagus must be too. There is as much difference, as there is between a goose and a gander. It is as tough as a stick; and this is the reason why people, when it is boiled, always are forced to eat the tops and leave the bottom of the shoots on their plates.

My way is, never to cut any shoots of Asparagus below the surface of the ground. Cut it as soon as it has grown to proper height, say five or six inches above ground The whole is then green, but it is all *ten*

der. Served with a little drawn butter, it will melt in your mouth. If your readers have any doubt of this, from having been in the habit, all their lives, of eating hard sticks of white Asparagus, only let them cut it both ways, and boil it on the same day, keeping the two lots separate, and my word for it, they will never cut another stalk below the surface of the bed.

Yours, &c. T. B.

Climbing and Pole Roses for Hardy Culture.

BY ROSA, OF PHILADELPHIA.

[The following remarks on *Climbing Roses*, are from the pen of one of the most distinguished Horticulturists of Philadelphia, whose knowledge on this subject is very full and complete. We hope to see his communications frequently in our pages.]

.....

The cultivation of the Rose has been a favorite object for many ages. As time passes, the interest increases; every year bringing to our notice some new feature, some special favorite in color or character. Every year develops some new branch of the art of hybridising, and by its means, offers us new attractions, and attains grander results.

Under the head of *Climbing Roses*, allow me to cull my own flowers, and select my plants from any of the families of the tribe, to accomplish my object. The Rose family has become one of such boundless extent, that I shall, for the present, confine my remarks to a few of the most desirable of those of larger growth.

Roses were formerly all alike indifferent; having a few meagre petals, distorted with the least toss of the wind; now we have choice of every grade and color, large or small, and so brilliant that they can be seen a mile off, forming objects that the most indifferent observer must admire. On my table lie 24 flowers; few, or none of them rare; all can be easily obtained; they embrace every color, from pure white to dark crimson purple, selected from several families, all adapted to any situation, and will grow from 3 to 30 feet each year; but to produce this growth, the ground must be in prime order, rich and mellow—loam and well rotted manure, half and half, well incorporated; the ground requires also to be of a dry nature, not subject to be inundated with water. Having such material and situation, success will follow; and it may be observed that plants of two years' growth will be more successful than those of five or six years.

Blanchefleur, *hybrid China*. Pure white, of a very double compact form; an abundant and early bloomer, adapted to a pole of six feet; very hardy.

Madam d'Arbly, *hybrid climbing*. Will grow to any extent; the flowers are white, in exuberant clusters; foliage large and dark green; excellent for an arbor or covering any object. I saw a plant to-day, trained in pillar form, at least 16 feet high, with its thousands of snowy blossoms, backed by a noble purple-leaved beech, forming a striking contrast.

Baltimore Belle, *Prairie*. Pale waxy blush, very double, in large clusters; in growth, almost equal to the former, and a few days later into bloom; perfectly hardy, and will withstand, with all the Prairie Roses, the coldest climates, or the hottest suns.

De Lisle, Blush Boursault, &c. The earliest of roses, producing exceedingly large flowers, with a deep rose centre, and perfectly double.

Pallida and Superba, *Prairie*, are different, but certainly very much alike, requiring close observation to detect any distinction; they are both blush, inclining to pink. *Pallida* has the color most in the centre.

Youland d'Arragon, *hybrid perpetual.* Is of a fine deep blush, a rare color in the family; grows strongly, and blooms repeatedly during the season; it makes a beautiful pale rose of about five feet, quite fragrant.

Princess, *hybrid China.* "A rose without a thorn;" rosy blush, blooming in clusters; a late variety, admired for its delicacy of color and fragrance; a plant suitable for a pole eight or ten feet high.

Phillipar, *Noisette or Bourbon.* Of a hardy nature, admired for its profusion and peculiar rosy lilac hue, blooming without intermission from June till November. I have seen a plant covering a fence twenty feet long, and eight feet high, and for five months never without a flower.

La Tourterelle, or Dove Rose, *hybrid China.* A variety that keeps in bloom for a length of time; is very early, large cup shaped, perfect, always fine and fragrant; of a purplish lilac or dove color; it will cover an arbor or pole of 18 feet in a few years.

Grillory, *hybrid China.* Is of a peculiar shaded, rosy violet color, the flower of the largest size, with petals bold and well rounded. When in bud it is most magnificent, but the flower and color very soon fades. It suits a pole of eight feet.—(*To be continued.*)

FRUITS IN WESTERN NEW-YORK.

BY W. R. SMITH, OF MACEDON, N. Y.

The original settlers of the "Genesee Country" frequently supplied themselves with fruit, by planting unimproved trees, raised from seeds brought with them. It is reasonable to suppose that these were generally selected from favorite and superior kinds.

For many years, cider was considered one of the most profitable farm products; and this occasioned the planting of natural or cider fruit to an indefinite extent. From the many varieties thus produced, some of inferior quality have been propagated. Others, possessing merit, have, I think, been over-praised; while others, again, will be considered as acquisitions to the choicest collection.

The design of this, and by permission, of subsequent communications, is to throw such light upon this interesting subject, as I may be able, and to assist in forming a correct estimate of the value of kinds under notice.

The Northern Spy.—The description of this fruit, when in perfection, is too well known to need a repetition. It has many excellent qualities, such as good size, fine appearance, and high flavor, with a grateful freshness during the spring months, when well kept. This commendation applies, however, only to specimens grown under favorable circumstances; that is, upon *young* trees. It seems not to have been noticed publicly, except by the editor of the Western Reserve Magazine, that as the tree advances in age, the fruit almost correspondingly deteriorates. I have this, upon the authority of several intelligent culti-

vators, and my own observations accord therewith. Last autumn I visited several orchards where this variety was raised, and among these, that of Timothy Buell, Jr., East-Bloomfield. Here were trees, which had been grafted about twenty years, were well pruned, healthy, and in good soil, though under grass. The apples were about one-fourth the size usually described. Under the same circumstances, were *young* trees, showing many superb specimens; but even here were intermixed too large a proportion of small ones.

I think I have examined the subject sufficiently to say, that this fault is characteristic of the variety.

Now, it is possible, that like the Yellow Bellflower, it may not succeed as well in the stiff loams of East-Bloomfield, as upon a lighter soil; or that like the Newtown Pippin, generous cultivation may in some measure remedy its deficiencies; but, unless this can be done, however valuable for the garden, or small orchard, it is worthless as a *market* fruit, when compared with the Baldwin, Newtown Pippin, or Roxbury Russet.

Macedon Nursery, 5 mo., 1846.

SWAINSTONE'S SEEDLING STRAWBERRY.

Among all the new varieties of strawberries that have come to us from England, within the last five years, few that we have seen are superior to Swainstone's Seedling.

A year ago we were in Boston, at one of those interesting and beautiful weekly exhibitions of fruits and flowers, made by the most zealous of all our horticultural societies, that of Massachusetts. Strawberries were then in perfection, and a great variety of sorts were contributed. In addition to all the leading kinds, both native and introduced, some new seedlings were shown for the first time. We had the honor of the very *piquant* and agreeable invitation to sit on the committee of *taste*, to decide which were really the best sorts in point of flavor. We do not at this time mean to say what celebrated kinds were tasted and passed over in silence, as far below the standard of *high* flavor; but some fine dishes of Swainstone's Seedling, from the President of the Society, seemed to pass round the committee's table so much more rapidly than those of any other sort, and to be tasted again and again with so much more relish and *gusto*, that there was soon no doubt which sort had the popular vote; and the matured and grave sense of the meeting, if we remember correctly, was that nothing there seen or tasted, surpassed or even equalled Swainstone's Seedling in point of *high flavor*.

After this, we may say, that Swainstone's Seedling is now in full bearing with us this season. It is certainly a strawberry of the *very highest* flavor, of great beauty of appearance, and an excellent bearer. It is said in England to bear for a long time in succession; of this point we are not yet able fully to speak, though its crop is certainly maturing gradually, and not all at once as does that of many sorts.

The fruit of this strawberry, with us, is of average large size: from three to four inches in circumference are the ordinary dimensions. The foliage is very large and rich in appearance, and the foot-stalks of the leaves are long. The fruit is borne in large clusters on high and pretty strong foot-stalks. The berries are very regular in

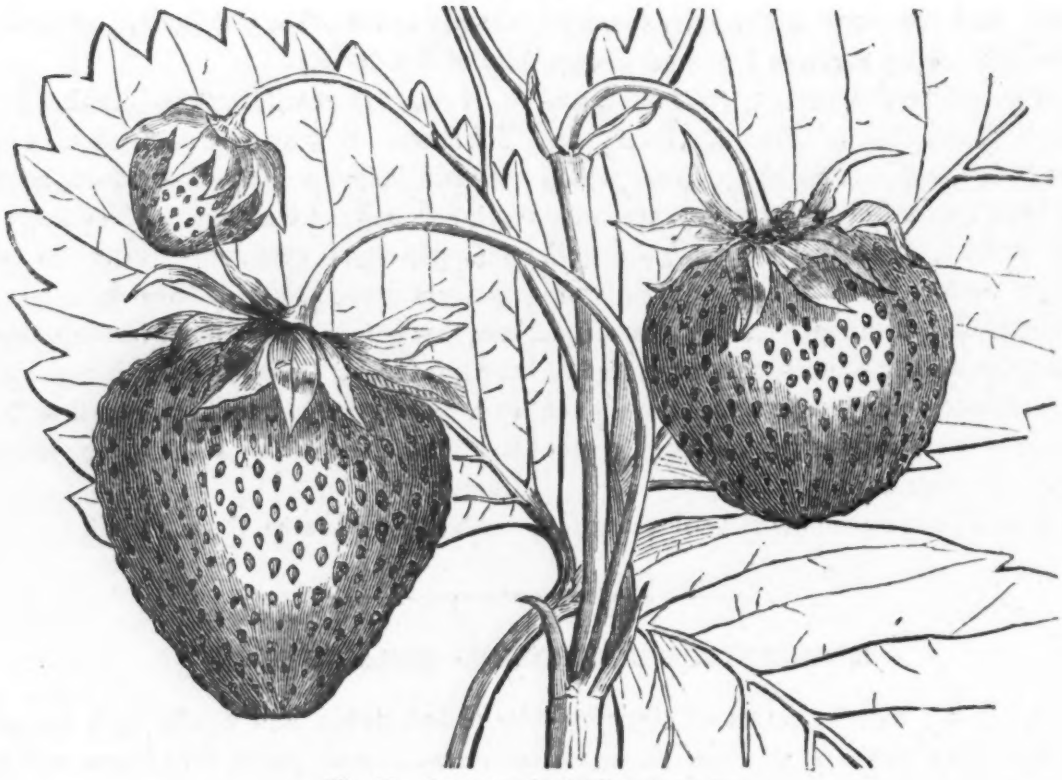

Fig. 16. *Swainstone's Seedling Strawberry.*

shape, varying from ovate to conical. The seeds are very slightly sunk; the surface of the fruit is rather even, glossy, and of a beautiful light scarlet, a good deal lighter in color than that of most pine strawberries. The flesh is solid, and very high flavored. The season of ripening is about midway between early and late, but it continues ripening for a good while.

Last winter is the first in which we fairly tested the *hardiness* of this variety. With us, it has so far proved perfectly hardy, much more so than some of the old Pine strawberries. But as it is yet comparatively new in this country, it remains to be proved how far it will answer for general cultivation in all parts of the country.

In England, Swainstone's Seedling bears a very high character. It is placed among the few which rank as of the first quality, in all respects, in the garden of the Horticultural Society of London. Dr. Lindley recommends it as one of the six very best sorts for cultivation in that country. Our own experience, thus far, leads us to believe that it will prove, on the whole, one of the very finest of Pine strawberries for this climate.

REMARKS ON THE USE OF GUANO.

BY LONG ISLAND.

Dear Sir—In common with many other persons, my attention was last season turned to this new manure. A substance for which it was claimed that it was cheaper and more powerful than fifty times its weight in common manure—that it could be transported and applied with little or no cost—and which acted upon all kinds of

vegetable growth with wonderful power, could not but demand the immediate and serious attention of all farmers and gardeners.

I procured half a ton of the best Guano, in April, 1845. I applied it at the rate of 400 pounds per acre, to fields of corn and potatoes, and to a great variety of garden crops. The season, as all your readers will remember, was an unusually dry one. In the case of my potatoes, that portion of my field to which Guano had been applied, was decidedly injured by its application. The yield was one-third less than an adjoining equal portion of the same field, where common barn-yard manure had been applied at the rate of eight wagon loads to the acre, and even considerably less than another equal portion of the same field, where no manure whatever had been applied.

To my field of corn, I gave a top-dressing of Guano, when the blades were about two inches high. The benefit was not great, but the field was perceptibly greener, and a little more vigorous than an adjoining one treated in the common mode.

In my garden, I perceived but little benefit from the use of Guano. Peas, strawberries, and beans, treated pretty liberally with Guano, showed no improvement whatever. A large patch of onions, with which Guano had been drilled in, almost entirely failed; another patch in the same soil, manured slightly with compost, succeeding perfectly well. All plants newly transplanted, to which this stimulant had been applied in the soil around the roots, died—even when only a small quantity, previously mixed with soil, was used; and many young crops of vegetables, to which Guano was applied as a top-dressing at the rate of 300 pounds to the acre, were nearly burned up by it.

So far is but the experience of last season—a single year, and the most unfavorable of summers for growth.

This season, not discouraged by my bad success, I have tried Guano again. Its effects are almost entirely the reverse of those of last year.

I have applied Guano to the very same crops as last season. In almost every case, its effects have been all that I could desire. My small fields of potatoes and corn, treated with it at the same rate as in 1845, show, at the present moment, a very different appearance. In short, their appearance is all that I could desire. In several crops, the strength and growth of the crop treated with Guano, is almost double that of those treated in my ordinary way with manure.

In kitchen garden vegetables, the result is equally satisfactory; excepting in the case of cucumbers, I do not recall one vegetable that has not been greatly benefited by it—that is to say, in their growth and general aspect. My strawberries, in rows side by side, every other one of which was watered with liquid Guano, show the greatest improvement in those rows so watered.

But the effect is perhaps more clearly visible in grass lands. To them, I applied in March Guano mixed with double its bulk of plaster. The growth was so changed in color in one week, that it was noticeable almost as far as the eye could see the field. At the present moment, my men are mowing and making hay; and the yield, judging merely by the loads, is one-third heavier.

You will naturally ask why this great difference in the results of the two seasons? I answer, solely on account of the difference in the seasons themselves. Last year was so dry, that the Guano either had no effect, or else it was worse than useless; acting like caustic, and absolutely burning up the crops.

Besides this, I learned something from experience in the way of using Guano.

This year I have only used Guano either during a shower, or before a storm. So used, it always acts like magic. Once or twice, when I was so unlucky as to use it unseasonably—that is to say, no rain, but several hot dry days following, the effect was bad—the plants suffered, if much was applied; or the effect was not to be seen, if only a little was put on.

I offer these remarks in a very simple and candid manner, because I think it is only by a comparison of experiments that the public will get to know any thing about the value of Guano.

My own opinion is, that it is a very powerful manure; a rather dangerous manure in the hands of beginners, and those unacquainted with it. I do not think it is of any value here, unless applied pretty early, and when a moist season follows; then it is of the greatest value. It is not so good on dry soils as on moist ones, and it will never be worth so much to us as to the English. If we could afford always to apply it in a liquid form, it would be the best way; as it is, my advice is, use Guano, but only use it in rainy weather.

Respectfully yours, LONG ISLAND.

Culture of the Laurel—Interesting fact in Horticulture.

BY J. J. THOMAS, MACEDON.

It is well known that the Laurel, one of the most beautiful evergreen and flowering shrubs, will not flourish on most of the fertile soils of the country, and especially on what are termed *limestone* soils. An eminent horticulturist of Western New-York,* has lately tried experiments with its management, which have proved completely successful. His operations were founded on the position, that this plant, like many others, will not flourish in soils containing carbonate of lime,—and that where portions of soil have been for centuries subject to a free natural drainage below, the carbonate of lime has been gradually dissolved and carried away by the insensible portion of carbonic acid contained in the water thus passing downward through the surface soil.

Acting in accordance with this belief, soil was obtained from the banks of gulleys, where this filtering was supposed to have been most completely effected, and carted to the garden where beds were formed, and the Laurel transplanted into this newly deposited soil. The result was entirely successful, though all attempts on the common and adjacent soil had failed. Whether the theory be correct or not, the practice may be of use in many other cases.

It may not always be necessary to resort to gulley banks, as knolls and other elevated points of soil may possess similar properties. The character of such soils is often indicated by the nature of the vegetable growth it supports. In the beds of soil thus formed, the common *red sorrel* was found to grow perfectly rampant.* It may, perhaps, be familiar to many of our readers, that the red sorrel more frequently flourishes on knolls, hill sides, &c., where this drainage, already spoken of, most effectually takes place.

It may also be found, that such plants as the Laurel may be cultivated to advantage by the application to the soil of certain

* David Thomas, of Cayuga.

* This plant, the *Rumex acetosella*, must not be confounded with the wood sorrel, or *Oxalis acetosella*, which flourishes in rich calcareous soils.

vegetable substances, tending to produce a similar character as to the effect. An interesting experiment, mentioned by Edmund Ruffin, in his Essay on Calcareous Manures, may serve as an illustration:

"One of the washed and barren declivities, (in lower Virginia,) which are so numerous on all our farms, I had, in February or March, packed full of green pine bushes, and then covered with the earth drawn from the equally barren intervening ridges, so as nearly to smooth the whole surface. The whole piece had borne nothing previously, except a few scattered tufts of poverty grass and dwarfish sorrel, all of which did not prevent the spot seeming quite bare at mid-summer, if viewed at a distance of one hundred yards. The land was not cultivated nor again observed, until the second summer afterwards. At that time, the piece remained as bare as formerly, except along the filled gulleys, which, throughout the whole of their crooked courses, were covered by a thick and tall growth of sorrel, remarkably luxuriant for any situation, and which, being bounded exactly by the width of the narrow gulleys, had the appearance of some vegetable sown thickly in drills, and kept clean by tillage." The species of pine is not named—there may be a great difference in the effect of different species—the acid taste of its leaf is mentioned.

Macedon, 6 *mo.*, 1846.

ON THE CULTURE OF PEACH ORCHARDS.

BY J. W. THOMPSON, WILMINGTON, DEL.

[Mr. Thompson, one of the most intelligent orchardists in the country, has kindly sent us the following letter. It has already been published in the Southern Planter; but the whole subject of the peach culture is touched upon in so interesting and practical a manner, that we shall very gladly lay it also before our own readers.

We are gratified to perceive that Mr. Thompson agrees with us in our opinion that a rich and rather strong soil,—that is, "a rich sandy loam with clay," is the best for this fruit tree. Our readers may not all be aware that ours is, at the present moment, *the largest peach growing country in the world.* One must remember that even in "sunny France," the peach is chiefly grown on walls or trellises, to understand how superior is our climate for the orchard growth of this delicious fruit. We ought to add, however, that many of our great market growers raise peaches of comparatively inferior flavor—chiefly because such are usually enormously productive sorts. So soon as the taste of consumers reaches that point that they are willing to pay extra prices for *high flavored* sorts, so soon we shall have these high flavored sorts brought to market in abundance. Last season we observed that a few hundred baskets of this kind were readily sold in the markets of New-York, at prices one-third higher than the ordinary ones. The moment this appreciation of *quality* becomes more general, the common Melocotons will give way to such fruits as George the Fourth, large Red Rareripe, &c. There is as great a difference between the two classes, as there is between a sour orange, and a genuine luscious Havana.—Ed.]

MR. EDITOR—As the season of the year is at hand for transplanting peach trees and setting out orchards for the production of this luscious fruit, whether for family use or the supply of city markets, it occurs to me to redeem the promise I made you and several of my Richmond friends last spring, and now to give you some account of the introduction and cultivation of the peach tree in Delaware. I do this the more readily, as I may impart to you some useful information, and through your widely circulated journal answer many queries put to me (and which I have not had leisure to reply to,) by several gentlemen in the more southern and south-western states.

Before I do this, permit me to call your attention to a publication in the last January number of the "Planter," with a view to its correction of a notice on the "profits of raising fruit" in Delaware. "The product of one large peach orchard in the *little state of Delaware*, was sold last year to a company in New-York city, for *fifty thousand dollars*, and it is said the company realized *sixteen thousand dollars* profit by the operation. From the same orchard fruit has been sold to the amount of one hundred thousand dollars." All of which, for the sake of truth, and on behalf of our extentive peach growers, I must protest against, and pronounce *a mistake*—an over-wrought picture, much too highly colored, and calculated to mislead and disappoint the public mind. In contradiction of the statement alluded to, I am supported by Mr. Isaac Reeves and Mr. Philip Reybold, Jr., two of our largest and most successful cultivators of fruit; and will only add whilst on this subject, that the owners of our large orchards *never lease* them out, but market their own crops by steamer or schooner boats, generally chartered by the season or month; and that from the profits of sale, all the expenses of cultivation, picking, transportation and the interest on the land, must be deducted, to a large amount, which will lessen very materially the nett proceeds of the most extensive orchards. Though in the early stages of the business the profits were great, yet in the rapid increase of orchards and production of fruit, they have much diminished, but are still handsome to those most extensively engaged at present.

To Mr. Isaac Reeves, a native of New-Jersey, is the whole credit due of first introducing, on a large scale, the culture of the inoculated peach tree into Delaware. The late Mr. Jacob Ridgway, of Philadelphia, owning a farm near Delaware City, on the Chesapeake and Delaware canal, was induced by Mr. Reeves to become his partner; and upon this property, in the spring of 1832, they set out the first twenty acres of inoculated peach trees ever planted in this state, with the view of supplying the Philadelphia market. They rapidly extended their plantation to about one hundred and twenty acres—were eminently successful, and one year—the *very best* season they ever had—their gross income from the sales of fruit was about sixteen thousand dollars. Peaches then commanded from one dollar twenty-five cents to three dollars per basket, containing about three pecks each. In the spring of 1836, the late Mr. Manuel Eyre and myself followed suit upon our "Union Farm," midway between Wilmington and Newcastle, on the Delaware river, to about the extent of one hundred and forty acres. In a year or two afterwards, Mr. Philip Reybold and Sons went into the business—then a host of others, until now, from twenty-five hundred to three thousand acres of land, in Newcastle county, are planted with, and successfully cultivated in peaches—making Delaware, though the smallest of the states, the largest producer of this fruit. The result has been a proportionate diminution of price, the average per basket, one season with another, not exceeding from thirty to sixty cents. In this way, Delaware has become the principal supplier of the Baltimore, Philadelphia, New-York, and North River town markets, and many of our fine peaches now reach Boston. The whole annual income from this branch of business to the farmers of this county, may be estimated at from one to two hundred thousand dollars. For so handsome an additional product, the agriculturists of Delaware, as well as the consumers of peaches in our vicinity, owe a debt of gratitude to the *originator* of the culture, to whom, as one, I should gladly unite in presenting some valued and lasting memento in recognition of his merit for giving a *new staple to a state*; for who is a greater benefactor to mankind and the age he lives in, than he who brings into operation a new branch of business, gives, by his enterprise and perseverance, an impetus to agriculture, causes the earth to give forth its increase, and so multiplies its fruits as to bring them within the reach and enjoyment of all?

The great improvement made in peaches within the last few years in New-Jersey and Delaware, consists in propagating none but the finest kinds, by *budding and grafting*, so as to have the fruit *as early* and *as late* as our latitude will admit of; the earliest ripening with us from the first week in August, such as Troth's Early, Early York, and Early Ann, and ending in the latter part of October, with Ward's Late Free, the Heath, Algiers' Winter, &c. I need not take up your time now with enumerating all the different varieties used and planted out to keep up this succession—some of the principal ones are (in the order of enumeration) Troth's Early, Early York, Early Ann, Yellow Rareripe, Red Rareripe, Malacatoon, Morris' White, Old Mixon, Rodman, Ward's Late Free, Malden, Free Smock, Late Rareripe, Heath, Algiers' Winter, &c. These trees are generally obtained for about six dollars per hundred, from approved nurserymen in Delaware and New-Jersey, and the rearing them constitutes a distinct business of itself. They are produced by planting out the peach stones, or pits, in the spring, which have been slightly covered with earth in the fall, so as to be exposed to the action of the winter's frost. The sooner the pits are put in the sand or earth, after the fruit is matured, the better; they should never become dry. The shoots from these stones are budded in August of the same year, from four to six inches from the ground. The ensuing spring all the first year's growth is cut off above where the scion has taken—not, however, until it is well developed—

when, in the fall and following spring, they are ready for transplanting or sale.

The mode of preparing the ground for them is precisely that with us of the Indian corn crop; the earth is well plowed, and from thirty to forty bushels of lime is spread upon it to the acre. The trees of like kinds (for the convenience of picking) are then set out in rows at distances varying from twenty to thirty feet apart, according to the strength of the soil; a crop of corn is then put in and cultivated in the usual way, and this is done successively for *three years;* by this time the trees begin to bear. The cultivation of the corn being the proper tillage for the trees, and this crop amply paying for all investment in trees, &c.

After the trees commence bearing, no other crop of any kind should ever be grown amongst them, as I have known two rows of potatoes between a row of peach trees not only to affect the fruit, but seriously injure the trees; but they should be regularly plowed some three or four times in the season, just as if the corn crop was continued. So obnoxious in our country, is the peach tree to the worm or borer—the *Egeria exitiosa*—that each tree in the orchard should be examined twice a year, summer and fall—say in June and October—by removing the earth down to the roots, and killing, with a pruning knife, every intruder—then scraping the injured bark and removing the gum. Thus exposed, they should be left for a few days, when the earth should again be replaced with a hoe. The limbs should be only moderately pruned, or thinned out, so as to admit the sun and air, avoiding in the operation leaving *forks*, which incline them to split when burthened with fruit. When the peaches ripen, they should be carefully picked from step ladders, seven to eight feet high, into small hand baskets, holding one peck each. Our operators for this purpose are both men and women, who earn from fifty to seventy-five cents a day, besides being found. These baskets are gently emptied into the regular market baskets, which are all marked with the owner's name, and strewed along the whole line of orchard to be picked. As these are filled they are put into spring wagons, holding from thirty to sixty baskets, and taken to the wharf, or landing, where there is a house, shed, or awning, for the purpose of *assorting them*, each kind by itself, which is into prime and cullings—the prime being distinguished not only by their size and selection, but also by a handful of peach leaves scattered through the top. They are then put aboard the boats in tiers, separated by boards between, to keep them from injury, and so reach their destined market. We consider a water communication from the orchards, or as near as may be, most essential, as all land carriage more or less bruises or destroys the fruit. Our roads through the orchards and to the landings are all kept plowed and harrowed down smooth and even. The baskets for marketing the peaches are generally obtained in New-Jersey, at from twenty-five to thirty-seven dollars and fifty cents per hundred.

With trifling modifications our culture and practice may be made to suit not only the southern but the south-western states. I may here, perhaps, properly remark that the average life of our trees is from nine to twelve years, when properly cared for and protected, as I have described—that the two great and devastating enemies, the trees have to contend against, are the "*peach worm*" and the "*yellows*;" the first readily yielding to the *knife* and the treatment of semi-annual examination; the latter being a *constitutional, consumptive,* or *marasmatic disease,* for which no other remedy is as yet known or to be practised, but *extirpation and destruction.* There are *many theories* and *some practice* recorded on this, by far the most destructive enemy of the peach tree. I may hereafter give my own views on this particular and obscure disease. I concur, however, with Mr. Downing, of Newburgh, that the great and prevailing disposition of the peach tree in our climate, is to overproduction of fruit in favorable seasons. Our remedy for this is to carefully thin it off by plucking all those that touch, or are within two or three inches of each other, when the size of hickory nuts, which are thrown into some running stream, or into the hog-pens to be devoured. His mode of "heading in," or pruning one-half of the producing buds is new to me, but which I have just tried upon my garden trees in the city, and will be able to speak of *experimentally* hereafter.

With us in Delaware, as every where else, the peach tree *succeeds best* in a *good soil.* That preferred is a rich sandy loam, with clay. Many of my finest trees and choicest fruits are grown in a loose and stony soil. The trees should never be set out in wet, low, or springy situations, and for the same reasons, high and rolling ground should be selected for your plantations, and for the additional circumstance that they are less obnoxious to early frosts. I have no doubt of their full success upon such grounds as I visited upon the "Falls plantation" of Mr. Marx, near your city, the estates and high grounds of Mr. Richard Sampson, and such as I saw at Pikonokee, Tuckahoe, and upon other similar sites on the James and Chickahominy rivers.

I may further remark, for the benefit of those desirous to pay some attention to the cultivation of peaches, (and *who should not be?*) that considerable additions of new and valuable varieties, *native* as well as *foreign*, are annually being made to those already known among us—many of them very fine. I have now several hundred raised from pits, imported for me by N. Frazier, Esq., of Philadelphia, Consul at Buenos Ayres, and long a resident merchant in that city, many of which will bear this year and next. To Mr. Sayres, of Sparta, Georgia, I am also indebted for a full sample of the native Georgia varieties, as well as to some other gentlemen in different states—all of which I mean to test and bring into notice, if of sufficient value. Whilst in the vicinity of Richmond, Norfolk, Fredericksburgh, Petersburgh, Winchester, and other large towns of Virginia, the peach tree may be cultivated with profit for the market, and all over the state, for the purpose of drying, every farmer and owner of a lot may raise them in abundance for his own use.

Yours, &c., JAMES W. THOMPSON.

Wilmington, March 26, 1846

Is the Naturalization of Plants impossible?

BY M. NEUMANN, PARIS.

[THE following is a translation of an article in the Annales d'Horticulture, Paris, which was lately read before the *Société Royale d'Agriculture* of France. M. Neumann is one of the most intelligent French horticulturists; and his opinions are entitled to grave consideration. We think, however, there are some facts well known in this country, and to which we shall hereafter refer, that will tend to prove that the kind of naturalization brought about by sowing the seeds of successive generations, is practicable to a certain extent. But undoubtedly *hybridization* is the shortest and most certain road to this result.—ED.]

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It has often been said, in the meetings of the Royal Agricultural Society, that the naturalization of plants is an easy and a natural process. Its advocates have even frequently cited as illustrations, plants originally from warm latitudes which they say are now naturalized here. I have heretofore dissented from this opinion, and I wish, at the present moment, by the aid of additional fact and experience, to demonstrate the impossibility of the naturalization of plants. In short, I wish to undeceive those, who, resting on this baseless theory, as hitherto held, still indulge the hope of enriching our soil with exotics that nature has only bestowed on favored climates, whose mean temperature is much higher than our own.

I am not however alone in this belief with regard to naturalization. In 1830, M. Poiteau, my friend and colleague, explained its impossibility to the class of pupils at the Horticultural Institute of Fromont. Later, in 1837 and 1842, he read before the Royal Horticultural Society two striking essays, showing the fallacy of this theory. I have now, therefore, the greater satisfaction in this coincidence of opinion, as I am about to bring the subject before you, and offer some new arguments against the theory of naturalization.

I ought to state in the outset, that the words *naturalization* and *acclimation*, as applied to plants, are nearly synonymous in my mind. In combatting one, I wish to be understood as equally opposing the other. The venerable and honorable André Thouin, whose memory we must always greatly respect, was not perhaps the first who believed that vegetables gradually become naturalized. But he was the first who attempted to establish the doctrine, now more than half a century ago, trusting as he did, that it would benefit his countrymen; for his leading motive in life was the promotion of the good of his fellow creatures. But unhappily nature's laws do not always accord with our theories; and since Thouin laid down the rules for the naturalization of plants, that is to enable them or their descendants to withstand a temperature much colder than that of the climate where they originated, we have not had the satisfaction of seeing any of these plants become really hardy, so as to bear the rigors of our climate.

Thouin's rule for naturalizing a plant, so as to render it or its seedling hardy, was briefly as follows:

"*A plant from a tropical country must be grown in the hot-house until it produces seeds. These seeds must be sown, and the plants raised from them cultivated until they in turn produce seeds. The same process is repeated with the seeds of this generation, and by continuing this, (always sowing the first and freshest seeds) from three to ten generations, we obtain, at last, naturalized plants —in other words, hardy plants, capable of bearing our winters.*"

I cannot but appeal to the members of this society for the proofs of this kind of naturalization? Seeds were often sown in the very mode pointed out by Thouin before his time; we are now raising seedlings in the same way every day. And yet we have never obtained a plant more able to resist the winters, out of doors, than the original parent specimen.

Thouin has told us that in this way the large Nightshade, (*Belle de Nuit,*) is naturalized in France. But really this plant is by no means naturalized. In India, its native country, it is a perennial, and although it has now been cultivated from seed here almost 300 years, its roots still freeze and perish every winter in our climate in the open border.

The author adds that in the same way the *Cyclamen d'Asie*, the *Sainfoin manne des Israélites*, the *Luzerne de Médie*, and many other foreign plants, have been naturalized in this country; but he does not tell us at what *altitude* these plants grow where they are natives. He does not, therefore, afford us any proof that they do not really exist in their native habitats in an atmosphere greatly like our own. In short, of the four examples of naturalization, cited by M. Thouin, one of them stands without evidence, and the other three are far from being well supported by proofs.

As to naturalizing plants from latitudes much warmer than Paris, by cultivating them first in the hot-house, afterwards in the green-house, and finally in the open air, it is a theory with no better foundation. Such of these plants, so treated, that were not able naturally to stand our winters, have never yet been brought to do so; and those which appear somewhat hardy, were really as much so, had they been tested the first season they were introduced. Thus, although we have cultivated

for a long time, under glass, the Fuchsia, the Clerodendron, the Madagascar Periwinkle, the Heliotrope, and a hundred other plants, the moment we consign them entirely to the open air, they all perish. There is that magnificent tree the *Acacia Julibrissin*, which we used to admire at Paris, but which we now rarely see. Our climate is a few degrees too cold for it; and therefore, until it is possible for man to change the nature of vegetables, or until Paris shall change its present mean temperature, we may rest assured that the Julibrissin will never really thrive here.

On the other hand, if many plants refuse to thrive in the open air in our climate, there are still a great many, though natives of distant countries, which accommodate themselves very well to our skies and soil, and seem to do honor to the cause of naturalization. But do we really perceive that they have changed or modified their nature, or their organization? Certainly not. They flourish in our climate, because they find here nearly the same temperature that they found at home.

Some time ago I received a foreign seed, which produced a tree. This tree I kept two years in the hot-house, because I had but a single specimen, and I was fearful of losing it. But soon after, finding that the shelter did not suit its habits, I planted it in the open air. There it found a temperature similar to that of its native country. It soon developed itself with great luxuriance. The leaves became at least ten times larger than when in the hot house, which was probably too warm for it. Here it soon showed its flower and fruit, and was in fact the fine tree from Japan to which botanists have since given the name of *Paulownia imperialis*. I am far from wishing to boast of having *naturalized* or acclimated it, since we cannot say that its nature has changed, or that it would not have stood at first with the greatest facility in our climate. But we can say that it finds at Paris almost the same temperature as in Japan, and that it thrives very well here.

It is a common remark, when talking of this subject, that the *Potato* is an acclimated plant. But the least frost always destroys it. Its seeds produce a great variety of sorts, of greater or less size, differently colored, and of better or worse quality; but *never any less susceptible to frost*. There are also many leguminous plants that we consider acclimated or naturalized here. But these same plants, whether multiplied by seeds or roots, always fall a prey to the same degree of frost by which they would have been destroyed the first year of their introduction.

If the naturalization of plants were possible, how is it to be accounted for, that, notwithstanding the Olive and the Orange have been cultivated for centuries in the *Département du Var*, they have never advanced in the least towards the interior of France?

Industry, the necessities of man, and the zeal of the cultivator, have indeed made great efforts to break down these natural limits drawn by nature; and the want of success, apparent to all, is well calculated to impress us with a belief that the naturalization of plants is an utopian scheme.

There is however one mode upon which the advocates of naturalization have not touched, by which to produce plants more hardy than their parents. This means is HYBRIDIZATION. If, for example, we fertilize the pistil of a tropical plant with the pollen of a plant nearly related, but a native of a cold region, the seed which will be afforded will yield a plant which will most probably be less sensible to cold than the mother plant. I have already made some experiments which appear to confirm this opinion. Thus among some seedling Rhododendrons, the product of a cross between the Chinese Rhododendron and those of North America, there are some which stand the winter perfectly, and others which fail to do so. One can even recognize by certain characters of the leaf, etc., those seedlings, among the number, which possess hardy properties, and those which do not.

The hybridization of plants, not having as yet been studied in this point of view, I propose to continue my experiments, and hope to have the honor of laying the results before the Royal Society of Agriculture. NEUMANN

REVIEWS.

THE VEGETABLE KINGDOM: *or the Structure, Classification, and Uses of Plants; illustrated upon the natural system, by* JOHN LINDLEY, Ph. D., F.R.S. & L.S., *Professor of Botany in the University of London, &c., with upwards of* 500 *illustrations. London, Bradbury & Evans. New-York, Wiley & Putnam. Price* $8.00.

WE look upon this new volume of Dr. Lindley's, as, in a popular sense, the greatest botanical work of the age. The artificial system of Linnæus, useful as it was in its day, is now laid aside by almost all modern botanists. It bears the same relation to the natural system, that a mere word-dictionary does to a profound work on the philosophy of language. So long as almost the whole vegetable world was yet to be classified and named, the system of Linnæus, which aimed at little more than fixing the generic and specific character of a plant, and thus enabling the student of nature to

recognise it by its appearance when in blossom, appeared sufficient. Plants of the most opposite natural traits, were assembled in the same classes and orders. It was only necessary that they should bear a resemblance in those important characteristics, the *stamens and pistils.*

It is not now necessary for us to inform our readers here, in what consists the superiority of the *natural* system. A system which assembles together plants by their natural affinities—their similarity in structure—their habit of growth—their resemblance in properties, uses, and qualities—which, in short, is based on the closest and the most numerous natural relations—cannot but be more philosophical, as well as more deeply instructive, than one depending upon a few arbitrary and insignificant characters. If we hold in our hands for the first time, a plant which we have ascertained to belong to the *fifth class* of Linnæus, we learn its name, and the fact that it has five stamens. Of its affinities and properties, its relative structure, and its place in the vegetable kingdom, we gather no additional information. Let us suppose, on the other hand, that we have before us a pea or a bean plant; this plant belongs to a very large *natural order*, containing not less than 6,000 species, distributed in all parts of the world; yet there are certain strong natural features which so distinctly mark the order, that having once become familiar with one member of it, we have a pretty distinct notion of the whole group. They all have either a *papilionaceous* (pea-blossom-shaped) flower, or a leguminous fruit; the latter consisting of a solitary pod, (carpel,) the style of which proceeds from the apex of the pod. While one large and well marked division of this order (*Papilionaceæ*) embraces all the *pulse* plants distinguished for nutritious or wholesome qualities, another, (*Cæsalpiniceæ,*) is noted for its purgative properties; and a third, (*Mimoseæ*) contains numerous plants characterized by the astringency of their bark, and the quantity of gum which they secrete.

Jussieu and De Candolle had thoroughly taught and established the natural system on the Continent, before the English public were willing, generally, to receive it. To Dr. Lindley, indeed, belongs the credit of demonstrating the great superiority of this arrangement to English students. His *Introduction to the Natural System*, was first published in 1830; since that time, he has been diligently engaged in perfecting his views of the natural method down to the present date.

The result of all his researches and investigations, joined indeed to those of all the leading botanists of the day, is contained in this great work—the *Vegetable Kingdom.* It is a thick octavo volume of 900 pages, which, for perspicuity, conciseness, clear scientific acumen, and profound views, is not surpassed by any similar work ever published. Lindley's mind, as compared with that of many of the continental botanists, is remarkable for that strong and clear *common sense* view, as opposed to every thing fancifully speculative or theoretical—a trait which seems to us peculiarly English.

In illustration of this, we quote the following remarks on the natural affinities of plants, from the Introduction:

The reason why the vulgar commit mistakes in judging of natural affinity is, because they draw their conclusions from unimportant circumstances, the chief of which are size, form, and color. The similitude of size gave rise to the old notion that all trees made a class by themselves; which is as if, in a classification of animals, the horse, the lion, and elephant, were placed in a different part of the animal kingdom from the rat, the cat, and the goat. Form is another of the false guides which lead to error; if all round-leaved or square stemmed plants are to be associated, so ought glass to be classed with the diamond when it is cut to the same shape. Color is less a source of mistake, and yet it is some-

times unconsciously employed by the superficial observer, as when he calls all yellow-flowered Composites Marigolds, and all white-flowered vernal bushes Thorns. It must be evident to the most careless thinker that such resemblances are trifling. That which really determines affinity is correspondence in structure. It may be said that those plants are most nearly related which correspond in the greatest number of points, and those the most distantly in which we find the fewest points of correspondence; and this must be true when we remember that if every point in the structure of any two plants is found to be alike, then those two must be identical. But it will be obvious that an examination of all plants through every detail of their organization is impracticable; it has never in fact been accomplished in any one case. Experience must have shown that the organs of vegetation are of very different degrees of value in determining resemblance in structure; that some are of paramount importance, others of less consequence, and others of comparative insignificance. Hence the relative value of characters forms a most important part of the study of the Botanist; it is in fact the pivot upon which all the operations of a systematist must turn.

The only intelligible principle by which to estimate their respective value is according to their known physiological importance; regarding those organs of the highest rank which are most essential to the life of the plant itself; placing next in order those with which the plant cannot dispense if its race is to be preserved; assigning a still lower station to such organs as may be absent, without considerable disturbance of the ordinary functions of life; and fixing at the bottom of the scale those parts, or modifications of parts, which may be regarded as accessory, or quite unconnected with obviously important functions.

The first office which all organized beings have to perform is that of feeding; for it is thus only that their existence is maintained. The second is that of propagating, by means of which their species is perpetuated. These being functions of the highest importance, it is reasonable to conclude that the organs provided for their proper execution must be of the highest importance also, and hence that they are beyond all others valuable for the purposes of classification. And again because the power of feeding must come before that of propagating, it might be conjectured beforehand that the organs destined for the former operation would afford the first elements of a Natural method. But since the action of feeding is very simple in the Vegetable Kingdom, because of the similar modes of life observable among plants, while, on the contrary, the act of propagation is highly diversified, on account of the very varied nature or structure of the parts by which it is accomplished; so might we conjecture that the organs of nutrition would afford but few distinctions available for purposes of classification, while those of fructification would furnish many. And such is the fact. Hence it is that the great classes of plants are principally distinguished by their organs of growth, and that in the numerous minor groups such peculiarities are comparatively disregarded, their chief distinctions being derived from their parts of reproduction. These principles are more fully expressed in the following axioms:—

1. Peculiarities of structure which are connected with the manner in which a plant is developed, are *physiological;* those which are connected with the manner in which parts are arranged, are *structural*. Physiological characters are of two kinds, viz., those which are connected with the *mode of growth (the organs of vegetation)*, and those which regulate *reproduction (the organs of fructification)*.—Physiological characters are of greater importance in regulating the natural classification of plants than structural.

2. All modifications of either are respectively important, in proportion to their connection with the phenomena of life.

3. If we allow ourselves to be steadily guided by these considerations, we shall find that the internal or anatomical structure of the axis, and of the foliage, is of more importance than any other character; because these are the circumstances which essentially regulate the functions of growth, and the very existence of an individual.

4. That next in order is the internal structure of the seed, by which the species must be multiplied. Thus the presence of an embryo, or its absence, the first indicating a true seed, the latter a spore, are most essential circumstances to consider. And so also the existence of albumen in abundance round the embryo, or its absence, must be regarded as a physiological character of the highest value: because, in the former case, the embryo demands a special external provision for its early nutriment, as in oviparous animals; while, in the latter case, the embryo is capable of developing by means of the powers resident in itself, and unassisted, as in viviparous animals.

5. Next to this must be taken the structure of the organs of fructification, by whose united action the seed is engendered; for without some certain, uniform, and invariable action on their part, the race of a plant must become extinct. Thus we find that the structure of the anthers, placentæ, and ovules, are more uniform than that of the parts surrounding them, while their numbers are variable; and the condition of the filament, which appears of so little importance in a physiological point of view, is also inconstant. So also the texture, surface and form of the pericarp, which acts as a mere covering to the seeds, is not to be regarded in these inquiries, and, in fact, differs from genus to genus; as, for instance, between Pyrus and Stranvæsia, or Rubus and Spiræa, in the truly natural Rosaceous Order.

6. On the other hand, the floral envelopes seem to be unconnected with functions of a high order, and to be designed rather for the decoration of plants, or for the purpose of giving variety to the aspect of the vegetable world; and, consequently, their number, form, and condition, presence or absence, regularity or irregularity, are of low and doubtful value, except for specific distinction. There seems, indeed, reason to expect that every Natural Order will, sooner or later, be found to contain within itself all the variations above alluded to. Even in the cases of regularity and irregularity we already know this to be so; witness Veronica

and Scoparia in Figworts, and Hyoscyamus in Nightshades, Delphinium in Crowfoots, and Pelargonium in Cranesbills.

7. The consolidation of the parts of fructification is a circumstance but little attended to in a general point of view, except in respect to the corolla; but as it seems to indicate either the greatest change that the parts can undergo, or where it occurs between important and usually unimportant organs, that in such cases the latter become essential to the former, it probably deserves to be regarded with great attention. For instance, the presence or absence of the corolla is often a point of little moment, and is, we know, a very fluctuating circumstance. This is especially true of those Natural Orders in which the stamens and petals are separated; as in Roseworts, Rhamnads, Onagrads, &c. On the other hand, when the stamens, which are indispensable organs, adhere to the petals, the latter are more constantly present, as in Figworts, Acanthads, Nightshades, &c.

The great superiority of this work on the Vegetable Kingdom, consists not merely in the great improvements made in the definitions of the natural groups, the orders and the alliances of plants. To the botanical reader, the admirable illustrations, liberally introduced upon almost every page of the work, are of the highest value. These consist generally of an example—usually one of the most characteristic—of each natural order; being an engraving, showing the most essential parts of the plant entire, accompanied also by such portions of the fructification, the fruit, and the seed, most clearly and beautifully delineated, as enable one to catch, almost at a glance, a correct notion of the structure and peculiarities of each natural group.

The Vegetable Kingdom is not a work so dry, technical, and scientific, as to be confined to the desk of the botanical student. It presents a broad and comprehensive view of the whole vegetable creation, embracing at the present time more than 82,000 species of known plants. Indeed the volume is replete with all the most interesting and remarkable points in the known history of vegetation.

Every one has noticed the little olive colored threads of vegetable substance which are attached to bits of rocks, or even float upon the surface of still pools of fresh water. These are *Confervas*, apparently one of the lowest and least interesting of all forms of vegetable life. Yet the following remarks prove how curious is their physiological history:

If doubts exist as to the vegetable nature of the last order, or of some parts of it, no question arises as to what that of Confervas is. Its genera are now admitted on all hands to be plants, since M. Decaisne's important discovery of the vegetable nature of several things which had been previously regarded as Zoophytes. Nevertheless, it is curious to see how much, at one period at least of their existence, they have of an animal nature, if the power of moving from place to place is to be taken as an indication of such quality. It seems incontestable, notwithstanding the denial of Mohl and others, that many of the Conferva tribe, especially of the genera Conferva, Ulva, and their near allies, produce in their tubular threads reproductive bodies, or spores, which, after a time acquire a power of rapid and quasi-voluntary motion while in the inside of their mother; that by degrees, and in consequence of their constantly tapping against the soft side of the cell that holds them, they escape into the water; that when there they swim about actively, just like animalcules; and at last retreating to a shady place, attach themselves to a stone or some other body, lose their locomotive quality, and thenceforward germinate and grow like plants.

From the remarks on the properties of the *Fungales*, we extract a singular account of the Toad-stool or Fungi, which the Kamchatkans indulge in as a substitute for *strong drink*.

This variety of Amanita muscaria is used by the inhabitants of the northeastern parts of Asia in the same manner as wine, brandy, arrack, opium, &c., is by other nations. Such Fungi are found most plentifully about Wischna, Kamchatka, and Wilkowa Derecona, and are very abundant in some seasons, and scarce in others. They are collected in the hottest months, and hung up by a string in the air to dry; some dry of themselves on the ground, and are said to be far more narcotic than those artificially preserved. Small deep colored specimens, thickly covered with warts, are also said to be more powerful than those of a larger size and paler color. The usual mode of taking the Fungus is, to roll it up like a bolus, and swallow it without chewing, which, the Kamchatkadales say, would disorder the stomach. It is sometimes eaten fresh in soups and sauces, and then loses much of its intoxicating property; when steeped in the juice of the berries of Vaccinium uliginosum, its effects are those of strong wine. One large, or two small Fungi, are a common dose to produce a plea-

sant intoxication for a whole day, particularly if water be drank after it, which augments the narcotic principle. The desired effect comes on from one to two hours after taking the Fungus. Giddiness and drunkenness result in the same manner as from wine or spirits; cheerful emotions of the mind are first produced; the countenance becomes flushed; involuntary words and actions follow, and sometimes at last an entire loss of consciousness. It renders some remarkably active, and proves highly stimulant to muscular exertion: by too large a dose, violent spasmodic effects are produced. So very exciting to the nervous system in many individuals is this Fungus, that the effects are often very ludicrous. If a person under its influence wishes to step over a straw or small stick, he takes a stride or a jump sufficient to clear the trunk of a tree; a talkative person cannot keep silence or secrets; and one fond of music is perpetually singing."

We are accustomed to consider some of the forest trees of this country—the sycamores of the Ohio, or the giant pines of the Columbia river, as at least respectable specimens of size and longevity. But they seem saplings of yesterday, when compared with some of the enormous leguminous trees of the forest of Brazil. Were it not that Dr. Martius on whose authority the statement is made, is one of the more careful and most accurate scientific travellers, one could hardly credit the pictures given of the South American forests.

"The locust trees of the West Indies have long been celebrated for their gigantic stature, and other species of Cæsalpinieæ are the Colossi of South American forests. Martius represents a scene in Brazil where some trees of this kind occurred of such enormous dimensions, that *fifteen Indians with outstretched arms, could only just embrace one of them.* At the bottom they were 84 feet in circumference, and 60 feet where the trunks became cylindrical. By counting the concentric rings of such parts as were accessible, he arrived at the conclusion that they were of the age of Homer, and 332 years old in the age of Pythagoras; one estimate, indeed, reduced their antiquity to 2052, while another carried it up to 4104; from which he argues that the trees cannot but date far beyond the time of our Saviour."—*p.* 551.

This volume is full of matter, such as will engage the profound attention of the botanist; but we have also made these few extracts to show the general reader that Botany is no longer the dry and dusty study of pistils and stamens that it once was. The Natural System forces the student of nature to take a wide and expanded view, not only of the structure, but of the relations, habits, properties, and indeed the whole history of the world, of the "flower and the leaf." The author of the Vegetable Kingdom has shown his usual ability in arranging his grand outline view of the splendors of this beautiful drapery of the earth's surface; and many more persons than the small class who are interested in the *systems*, will find pleasure and instruction in its pages.

There are numerous important botanical points of novelty and interest in this work. Dr. Lindley confesses frankly and boldly that he has, at the apparent cost of the charge of inconsistency, considerably changed, modified and improved upon his previous published views of the arrangement of the Natural Orders, in this his last work. We are glad to perceive it. No science has received a greater impulse, or made greater strides of progress, within the last ten years, than Botany. There is abundant proof, too, of a disposition on the part of Dr. Lindley, to purge science of all unnecessary technicalities—to render it appreciable to the common sense mind of the age, rather than to lock it up to the ultra-scientific few, which we hail with satisfaction in so prominent and so valuable a work as the Vegetable Kingdom.

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"New Botanical Work in Preparation. By Prof. Gray of Cambridge, entitled The Genera of the United States Flora, illustrated. This work is on the same plan as the *Genera Plantarum Floræ Germanicæ iconibus et descriptionibus illustrata, by Nus von Esenbeck*, a large octavo plate and two pages of letter press being devoted to each genus: but the detailed descriptions will be in English instead of Latin. The drawings, with full and complete analyses of the parts of the flower, fruit, and seed, made under the microscope, are executed by Mr. Sprague, an artist of extraordinary skill in such subjects, under Prof. Gray's direction, in every instance directly from nature. The drawings will be engraved on stone, in the style so successfully practised at Munich, by Mr. Prestle, an artist from that city. The work will be published

in whole volumes, as near as may be of 100 plates, and about 220 pages of text in each, taking care not to divide natural families, and following the general arrangement of Torrey & Gray's Flora of North America, or Gray's Botanical Text Book; and will comprise 8 or 10 such volumes. The first volume will be ready the ensuing autumn, and the others will succeed at the rate of two volumes a year until the whole is finished. The price to subscribers is fixed at SIX DOLLARS per volume of 100 plates (or at that rate when the number of plates, as may sometimes happen, considerably exceeds 100.)

Subscribers who pay for the volume in advance, will have the same delivered by mail, or otherwise, *free of expense*. All orders to be addressed to WILEY & PUTNAM, Broadway, New-York.

*** After the completion of the work, the price will be advanced."

[No person in America, we may safely say, is so well qualified for this undertaking, as the Professor in the botanical chair at Cambridge. We shall look with no little impatience for the appearance of this work. It will undoubtedly be one of the most interesting and acceptable scientific publications of the day.—ED.]

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A Guide to the Orchard and Fruit Garden: or an account of the most valuable Fruits cultivated in Great Britain. By GEORGE LINDLEY. *With additions of all the most valuable fruits cultivated in America, &c.; by* MICHAEL FLOY. *A new edition, with an Appendix, describing many American Fruits not mentioned in the former edition.* New-York, J. C. Riker, 1846.

LINDLEY's Guide to the Orchard is undoubtedly one of the very best English works on Pomology that have ever appeared. Its author, George Lindley, was a horticulturist of great practical knowledge, and had both unusual tact and large experience in Pomology. We have always been glad to bear testimony to the high value of his labors, and to the excellence of his "Guide to the Orchard."

This work was first published in 1831. We believe there was never but a single edition of it published in England. Mr. Floy did the American public, and the cultivators of fruit, great service, by republishing the work in this country in 1833, with descriptions of such native fruits as were then considered of most importance.

It is now, however, *fifteen years* since Lindley's Guide to the Orchard was written. Since that time, the advance that has been made in Pomology, and especially in the test and comparison of fruit, is indeed very great. The Horticultural Society of London, alone, have done more for the progress of this subject in that time, *than was ever done in a century before.* In this country, Pomology has grown to be a matter of general study and interest, almost wholly since that time. We were therefore not a little surprised on receiving a copy of this new edition of Lindley, by Mr. Floy. We expected, at least, to find a complete revision of those sorts which have been, since the issue of that work, proved and acknowledged synonymous, incorrect, or the merits of which had been rated too high or too low.

We find, on the contrary, that the whole body of the work remains just as it was when issued in London, by Lindley, fifteen years ago, or by Mr. Floy, in New-York, thirteen years ago. The reader, therefore, must look upon the work as representing the best state of knowledge on this subject at that time, and not at the present moment. The description of all the then well established sorts is excellent. Had its author, (the father of the present Professor Lindley,) lived till the present moment, he could have rendered the work as perfect as any other person whatever. But he would have regretted to see the work again reprinted in the face of all the discoveries, proofs, and experiences of fifteen years in the gardening world, without taking advantage of them. In peaches and pears especially, he described many sorts as distinct, which, with the larger experience that has since been obtained, every pomologist knows to be synonymous with others. Whoever, there-

fore, looks to the Guide to the Orchard as a pomological work of high value, *as a volume of reference*, will find it such. Whoever expects to find it a manual expressing the state of pomological knowledge at this time, will be greatly disappointed.

Mr. Floy's additions to the edition now published, are embraced in an appendix of 11 pages. In this, he notices 9 apples, 11 pears, 7 plums, and 2 quinces, not described in his edition of 1833. We suppose, therefore, these are all the American fruits of the last thirteen years, that he considers worth a place now in a work on Pomology. Such varieties as the Northern Spy apple, Crawford's Melocoton peaches, the Ohio grape, the Boston nectarine, the Fastalff raspberry, Hovey's Seedling strawberry, and other sorts of the highest reputation, he has not thought it worth while to introduce in this volume.

There are some odd *notions* in the appendix, which will not escape the eye of the pomologist, such as the following:

"DIX PEAR.—*We doubt whether this is not the old Brown Beurré.*

LOUIS-BONNE DE JERSEY.—*Probably the Louis-Bonne. It may, however, be a distinct seedling variety,*" &c.

Mr. Floy describes, under a separate head, (page 413,) what he calls the "New-York Virgalieu" Pear. As we understand his remarks, we infer that he wishes to establish the point that this sort is a seedling variety, raised by Williamson, a New-York nurseryman, more than forty years ago; and that it is identical with the sort generally known and described by us, and supposed to have been introduced by the late Parmentier of Brooklyn, as the *Surpasse Virgalieu*.

In all this, Mr. Floy may be correct. The history of the *Surpasse Virgalieu*, has always been involved in doubt; and it is by no means improbable that it was really raised by Williamson. The droll part of the affair is, however, this: Mr. Floy quotes as synonyms to this sort, the following names, viz:

Virgalieu. *Nursery Cat.* 1807.
Surpasse Virgoulouse. *Parmentier.*
Columbian Virgoulouse. *Bloodgood.*
Columbia. *Downing.*
St. Michael, of Boston cultivators.

Does Mr. Floy really suppose that the cultivators of Boston, to whom the *Surpasse Virgalieu* is well known, would ever confound it with the old St. Michael's or Doyenné? or that we could not tell the difference between this medium sized autumn fruit, and the large and distinct winter pear, known as the *Columbia*? There is no more resemblance between the two, than between a Newtown Pippin and a Roxbury Russet!

There is, as Mr. Floy truly says, no resemblance between the White Doyenné and the "New-York Virgalieu," (that is, the *Surpasse Virgalieu.*) But the Virgalieu of the New-York markets, and of the State at large, is by no means the Surpasse Virgalieu. It is the old White Doyenné, the St. Michael's of Boston; and this is, we believe, universally acknowledged by every fruit grower in the country.

Mr. Floy is, we believe, a worthy man and an experienced gardener. The description of the few American fruits in his edition of this work, published in 1833, were really excellent; and on comparing those with the hasty and imperfect ones in the appendix to this volume, we have more than once been tempted to believe that the latter were never written by him; but that his name has been used or continued to give currency to these crude additions to the original volume.

FOREIGN NOTICES.

THE English horticulturists seem to be suffering this season with a great number of vegetable maladies, not common in that climate. Dr. LINDLEY, in the leading article of the last number of the Gardener's Chronicle, says,—"An alarm has arisen among some of our correspondents as to the state of various kinds of plants in which they think symptoms of *unusual disease* are appearing; and they are apprehensive lest such general affections in the vegetable world should be forerunners of like plagues in the animal." Some of these correspondents have forwarded for examination shoots of the Lilac and common Laurel, "the young leaves and shoots of which were dying back, after becoming spotted, much in the manner of the potatoes, and here and there the lowest part of the shoots, next the old wood, was black and brittle, exactly as in the Potato haulm next the old tuber." In other districts the trees of the Pine family are suffering greatly. "Mr. AYRES, of Brookland, says that at Blackheath the whole of the foliage is falling off the Spruces and Larches, and though a few new branches are breaking out, their numbers are so few that the trees must be removed. At Wrexham, hundreds of Larches, 4 to 12 years old, are dying off this season. The disease seems to prevail mostly among trees of the age above mentioned. In a plantation about 30 years old, not one seems to be affected. The leaders and most of the upper branches are quite bare of leaves; and the lower ones seem scorched, and only just alive. *These trees have hitherto grown very rapidly.*"

Last season, in England, was just the reverse of ours; being a very *rainy* one, and causing an exceedingly gross and luxuriant growth. To this cause Dr. LINDLEY is inclined to attribute the unusual signs of disease. He says, "We do not recognize in these symptoms anything incompatible with a watery condition of last year's wood; arising not so much from excess of water in the autumn, as from want of heat and light to carry it out of the system. Under these circumstances it may be easily conceived that the resinous secretions, necessary to the health of coniferous trees, were inadequately deposited, and that now, when growth recommences, the young leaves cannot find in their neighborhood their food, (or organizable matter), in such a state that they can assimilate it. The result of that must necessarily be that the foliage will drop off; and the probability is that, in such cases, the wood will die back or prove permanently diseased." In the case of the lilacs, &c., the disease is attributed to the insufficient manner in which the wood of most plants was ripened last autumn.

We have referred to this more particularly from its analogy to the same thing, which every year happens more or less in this country—especially in the Western States, where from the depth and richness of the soil, the wood is often left in an unripe state when winter sets in. The pear-tree, being the most susceptible of all fruit trees, is in many places, from this cause, almost always affected by the *blight*—which is the result of a winter's cold on unripened wood.

.....

THE POTATO DISEASE. There is every reason to suppose that the Potato "murrain" will be worse in England this season than last. Many persons in England have already tried experiments by growing sets, carefully selected and planted, in pits and hotbeds—and almost uniformly the roots have rotted as soon as they have ripened. And this too in some cases when the plants were so situated as not to be exposed to wet. In the south of Europe the disease is spreading rapidly, and the potatoes from Lisbon then (May 30th) on sale in the London markets were said to be one sixth diseased.

It is stated in the Gardener's Chronicle that the same disease, or one apparently identical with it, has broken out and "assumed a putrid virulent form" among the *Yams* in Jamaica. It is feared that it may destroy the food of the West India islands, as it has done that of Ireland, and thus the sufferings of the Colonies there may be as great as that of the poorer classes in the latter country.

.....

DRYING PLANTS.—"In drying plants for a herbarium care must be taken not to press them so much as to crush them. Succulents and plants that drop their leaves, such as Heaths, should be dipped in hot water before they are pressed. Each specimen should be placed between a sheet of brown paper, and between each filled sheet several empty ones should be placed. For the first day or two the pressure should be only just sufficient to prevent the leaves and flowers from shrivelling. When the papers become damp the plants should be shifted to dry ones, increasing the pressure after every shift till the specimens are perfectly dry."—*Gardener's Chronicle.*

.....

TO DESTROY SLUGS.—"We strongly advise all who are attacked by slugs to try the effect of lime water,* which does not at all injure any crop, and immediately destroys the animal. To make the application efficient, it is, however, necessary to use it late in the evening and very early in the morning, say at day-break, when the slugs are feeding. A couple of applications of lime-water has completely exterminated legions of slugs under our own eyes." *Lindley. Ib.*

A correspondent of the Chronicle adds from his own experience: "The following mixture will kill slugs; gas water, 1 gallon; water, 6 gallons; lime, as much as it will take up. This beats plain lime water or gas water."

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THE NOISETTE ROSE.—The Noisette Rose is said by Mr. Rivers to have been raised from seed by M. Philip Noisette, of Charleston, America, and

* Lime-water is made by throwing a piece of quick lime of the size of one's fist into a pail of water. When it is dissolved, let it stand for some time to settle, when the clear water should be poured off and is ready for use.—[ED.]

sent by him to his brother in Paris. Now this does not happen to be true. It was raised by a gentleman on Long Island; a plant was brought from there by Monsieur Landonne, an intimate acquaintance of the raiser, to Rouen, where it was cultivated in large quantities. Pailland, a gardener at Rouen, when Noisette of Paris received a plant from his brother in America, (who by the by, might object to inform us how he got it from Long Island), grew it under an iron cage in one of his houses for protection, while it was being commonly sold in Rouen at a moderate rate. Prevost, the well known cultivator at Rouen, can attest to these facts.—*Annals of Horticulture.* [If this be true, (which we doubt,) why not give the name of the the "gentleman on Long Island" who originated it.—Ed.]

.....

London Horticultural Society.—The last (May) exhibition of this Society is represented as "perhaps the best that has ever graced the gardens." The day was very propitious, and the gardens were thronged with four thousand eight hundred and forty-four visitors, including Prince Albert. "As for the flowers," says Dr. Lindley "their beauty was beyond description. Never before was there such a blaze of rich colours, delicate tints, and magnificent vegetation assembled. The great table on which the Chinese Azaleas and Cacti were assembled was a pyramid of flame, and the exhibition of Orchids alone was 48 yards long, in a double bank; nor was there a bad specimen among them."

.....

The Yellow Pæony.—(Pæonia wiltmannia.) 'A more remarkable acquisition than a yellow Pæony, not a straw-coloured species, (which is only a spoiled white,) but a *true yellow flowered* plant does not often occur. All that we know for certain of its history is that it was received in October, 1842, in the garden of the Horticultural Society from M. N. de Hartwiss, the director of the Nitika garden in the Crimea; that it was just mentioned in the "London Journal of Botany" for April, 1842, by Dr. Fischer of St. Petersburg, who in a letter to Sir Wm. Hooker makes the following statement:—"Mr. Hartwiss has received many interesting plants from Abcharia, sent by Count M. Worontzoff. Among them he has found a yellow flowered Pæony. *Epimedium pinnatum,* and *Pinus nordmanniana,* the latter an Abies, said to be a beautiful tree."

We understand that 25 guineas was demanded for a single plant of it in one of the great continental nurseries. The species has much the appearance of *Pæonia cretica,* is quite hardy, and grows where any other Pæony will grow, and flowers in May. At present we believe that the plant in the garden of the Horticultural Society, is unique in this country.—*Botanical Register.*

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Preserving Pollen.—M. H. Haquin, a zealous and intelligent horticulturist at Liege, has succeeded perfectly in impregnating lilies with pollen kept for 48 days; the Azalea, with pollen kept 42 days; and, what is still more surprising, the Camellia has borne perfect seeds when the pistils were fertilized with pollen, gathered 65 days previously. M. Haquin has now fine hybrid seedlings from these plants, to the flowering of which he is anxiously looking forward.

As soon as the blossoms open, M. Haquin cuts off the pollen, (anthers,) and treats it in the following manner: "I cut off the stamens as soon as I see them, put them in a paper packet closely pasted, and place the packet for 24 hours in a warm and dry place. At the end of this time, the pollen dust is perfected. I then take the pollen out of the paper packet, and put it in another, made of very thin sheet lead. Afterwards, I place this in another paper packet, label it, and put the whole away in a place that is cool but not moist."—*Revue Horticole.*

[M. Haquin adds that he has the pollen of the Azalea and Camellia, preserved in this manner, with which he intends to fertilize the blossoms of *the ensuing year.* The fact of being able to preserve pollen, is one highly interesting to all amateurs who desire to raise new varieties, whether of flowers or fruit, by *crossing* or hybridizing; since it often happens that the plant to be fertilized blooms too early or too late, for the blossoms of the male parent. Or perhaps the sort to be fertilized, may be in one place, and the one which we desire to fertilize with, may be in another an hundred miles off. It is easy to see, that since it is found that pollen may be preserved, this is of no moment. The pollen may be gathered when scarcely mature, and kept for days or weeks; and it may be sent by mail from one part of the country to another.—Ed.]

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Earthing up Potatoes.—On this subject, Mr. C. W. Johnson says:—"I have long had doubts relative to earthing up potatoes being a beneficial practice, and now I am convinced that it is detrimental. The variety employed in my experiments are the Pink Kidney; all the sets were planted at the same time, (the first week in April,) in rows two feet apart, and eighteen inches in the rows; and were taken up September 24th, and weighed. The average of all my experiments gives exactly *an increase of one-fourth in favor of not earthing up;* but some of the plants gave still more, viz: as 42 lbs. is to 31¼ lbs. The experiment has been made on the sixteenth of an acre of good deep loam, with a cool, moist subsoil."—*Annals of Hort.*

.....

Camellia japonica.—Of the many ways of propagating this plant, few succeed better, for a new and dear variety, than that we should call *budgrafting.* This used to be done by Messrs. Brown of Slough, very generally, and with good success; every bud, with the smallest portion of wood attached, made a plant. The stock was cut down to within two inches of the surface, and the small piece of wood, with the bud attached, grafted on the top. Many ways may be employed to join these, and the only necessary precautions are, first, to leave a bud at the top or highest point of the stock itself, and to insert the graft so as to bring down the bud in it below the level of that of the stock, but on the opposite side. Whether this is by a sloping cut, (splice-grafting,) or by notching the stock and placing the graft on a wedge, (cleft-

grafting,) or by saddle-grafting, it matters not. A good fit is necessary, and the barks of the stock or graft, must exactly meet on one side, at the least, and by these means you may make a plant of every leaf or eye.—J. W. *Gardener's Gazette.*

.. ...

ANTS.—However these pests may plague you, all you have to do, is to make deep holes with a crow-bar, say two to three feet, and carefully withdraw the instrument so that the hole may be open; thousands, aye millions, of these little pests will fall down them, and not get out any more; in fact, the place will, in time, be completely cleared. When they congregate away from plants, boiling water will settle their accounts quickly; but the former method will do any where, if the ground will allow of holes being made, and the holes being kept open. In some light soils it is difficult, but if you can do it in no other way, soak it well with water first.—*Annals of Horticulture.*

[A writer in one of the French Horticultural Journals, says that he has used the fresh leaves of the tomato, with success, to drive away ants.—ED.]

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Mr. FORTUNE.—Two years ago, the London Horticultural Society, with praiseworthy enterprise, despatched Mr. Fortune to China, for the special purpose of making collections of all the most interesting trees, shrubs and plants, cultivated in that country, and which, previous to the late treaties, were not to be obtained by foreigners. We perceive it is now announced that he has just returned to England. His collections, *in eighteen glazed cases,* have arrived in beautiful condition, and will be put in course of culture at the Society's garden. The gardening world look forward with great interest to the results of this collection. The Chinese are the most patient and skilful of merely practical gardeners. Their double flowers are strikingly beautiful; and some of their fruits—as for example, the peaches of Pekin, are represented as of extraordinary size and excellence. The climate of a considerable part of China is so similar to that of this country, that many of its trees and shrubs prove perfectly hardy here, as for example the Chinese Magnolias and Wistaria.

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WEIGELA ROSEA.—This is one of the new plants sent home a year ago by Mr. Fortune, to England, from China. Its present appearance in the Society's garden, is thus noticed in the Gardener's Chronicle: "In the adjoining garden was a fine plant of *Weigela rosea,* sent home from the north of China. It has the appearance of a Syringa, (*Philadelphus*) with opposite, and nearly sessile leaves, of about three inches in length; and monopetalous tubular flowers of a delicate rose-color, hanging in loose clusters of from three to five at the end of every little side branch. This valuable acquisition to our gardens, has hitherto been kept under glass; but it is not improbable that it may yet turn out to be hardy. In the house recently erected in the hardy department, a thriving specimen of *Calystegia pubescens* will soon be in flower. This was sent from Shanghai, by Mr. Fortune, under the name of a *Double Convolvulus,* and is the first plant of its order that has been mentioned as producing double flowers. The latter are of a delicate pink color. If it should prove hardy, it will be a valuable addition to plants of that kind."

DOMESTIC NOTICES

SUPERB NEW CAMELLIAS.—The most remarkable novelties in the horticultural world at home, are the new Camellias which have been raised by COL. WILDER, of Boston. Among all the exquisite sorts that the skill and long-continued devotion to this plant have produced in Europe, we may safely say that none surpass in beauty of colour and perfection of form, these two new American varieties.

These Camellias were first exhibited on the 14th February, and the Massachusetts Horticultural Society, in their usual handsome manner, immediately signified their appreciation of their merits, by awarding their originator a PIECE OF PLATE of the value of fifty dollars.

The following extract from the proceedings of the Society comprises a full description of the new Camellias, and we therefore place it upon record:

"At a meeting of the Massachusetts Horticultural Society, on Saturday, Feb. 14, 1846, a vote was passed, directing the committee on Flowers to take *special notice* of the fine seedling Camellias exhibited at that time by Marshall P. Wilder, President of the Society.

"Agreeably to this vote, the Flower Committee submit the following report:

"The number of seedling Camellias exhibited was five. Two of them were of surpassing beauty and perfection. As the committee have had the pleasure of often examining the extensive collection of the President, as well as those of other gentlemen in the vicinity, embracing the most perfect varieties known among amateurs, they feel themselves sufficiently acquainted with this beautiful class of flowers, to judge the comparative merits of the seedlings under consideration, and they have no hesitation in pronouncing them as varieties of the *very first order,* and such as will be difficult to surpass in this or any other country. The production of two such remarkable varieties, by one person, we believe unprecedented, and will reflect much honor upon our President abroad, as well as upon the Society of which he is the head.

"We, therefore, recommend that a gratuity be awarded to the President, for these two superb American Camellias, and that it consist of a PIECE

of PLATE of the value of *fifty dollars*, and of such form and design as he may elect.

"JOS. BRECK, *Ch'n.*"

Description of the Seedlings.

"No. 1. Camellia japonica, var. *Wilderi.*

"Leaves one and a half inch broad, and three long, oval, acuminate, slightly dentated, a very dark green, with prominent midrib; petioles short; a shrub of free, upright, but rather slender growth; buds quite round, with pale-green scales; flower medium size, three and a half to four inches in diameter. Colour delicate clear rose; petals 75 to 80 in number, imbricated, of the most perfect rose-leaf shape, and arranged with most exquisite regularity, from the circumference to the centre; corolla very round, persistent, free in its inflorescence, every flower expanding perfectly, retaining its beauty for a long time.

"The superiority of this variety, when compared with those established favorites, the Old Double White, Lady Hume, Imbricata, and others, is its beautiful round petal, with scarcely a serrature or indentation on the edge.

"Raised from the seed of the single red Camellia, fertilized by Camellia japonica, var. punctata; the mother plant and all the stock, with the exception of a single graft, having been destroyed by fire, in the year 1841.

"No. 2. Camellia japonica, var. *Mrs. Abby Wilder.*

"The name was given by the committee, in honor of the lady of the President. This variety is a very beautiful one—a vigorous shrub of upright growth and strong branches; foliage large and handsome; leaves four inches long, by two and a half broad, roundish oval, a little reflexed, coarsely dentated, acuminate, with pale prominent midrib and nerves; yellowish green, resembling in color those of Camellia japonica Lady Hume; bud round with pale green scales; flower large, four inches or more in diameter, thick, full, and perfect; petals of beautiful form, very numerous, 90 to 100 in number; the exterior rows broad, circular, gradually diminishing in size to the centre, and arranged with great regularity; color white, with an occasional stripe of light rose, after the manner of Camellia japonica Duchesse d'Orleans; corolla very round and of great depth.

"Produced from seed of Camellia japonica var. Middlemist.

"The other varieties were not so remarkable as those described, but still worthy of notice, and equal in beauty to many varieties highly esteemed. As they have now bloomed for the first time, their character cannot be justly determined.

"No. 3 is a flower above medium size; color purplish crimson; fine shape, large petals, rose-leaved, perfectly arranged, compact with a full centre.

"No. 4. A beautiful flower, of medium size; color of the outer petals carmine, fading out to the centre to a fine deep rose color; petals spirally arranged.

"No. 5. Color bright rose, blotched with white; similar to Camellia japonica imbricata, but the color not quite so brilliant, and about the same size

"Having seen only the flowers of the three last varieties without the foliage, we are not able to give a full description; but it is not these varieties that the committee would point out to the Society as worthy the gratuity, but those first described Camellia japonica Wilderi and Mrs. Abby Wilder.

"All of which is respectfully submitted.

"JOS. BRECK,

"*Chairman of the Flower Com.*

"It was voted that the foregoing reports be entered upon the records, and published in the transactions of the Society."

The Massachusetts Horticultural Society have also voted a PIECE OF PLATE of the value of fifty dollars, to Messrs. HOVEY, of Boston, as a special premium for the Strawberry raised by them—HOVEY'S SEEDLING, a sort, which, *after twelve years' experience*, has proved one of the best.

And to SAMUEL FEAST, Esq. of Baltimore, they have given the Society's LARGE GOLD MEDAL, as a special premium for that beautiful seedling Rose, originated by him, the *Queen of the Prairies*, which they consider "the type of a new class of Roses, and without a rival in this climate for pillars, arbors, &c."

This liberal spirit, which dictates the encouragement of zealous and enthusiastic horticulturists, and singling out newly originated varieties of plants and fruits of high value, makes them the objects of the Society's approbation, and thereby giving them a more extended passport to public favor, we cannot too highly admire.

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THE FINEST CHERRIES.—While we write these notices the cherry season is at its height, and we have been pleasantly engaged, for the last two hours, in examining and tasting many varieties. Among all the light-coloured cherries, we find none to surpass, on the whole, for flavour, texture of the flesh and beauty of appearance, the DOWNTON. It is superior to *Elton* in this climate. The Flesh-coloured Bigarreau, (*Bigarreau couleur de chair*), is a very beautiful fruit, more tender-fleshed than most of its class, and really one of the best. It is fully equal in this climate to the Bigarreau (or Yellow Spanish) in flavour—and is perhaps rather sweeter. *Black Eagle* stands unrivalled for *high flavour* among black cherries, as Black Tartarian does for size and productiveness. For transparency and delicacy of flavour, the *Belle de Choisy* bears off the palm. Manning's Early White, Bowyer's Early Heart, and Rivers' Early Amber, are evidently all sub-varieties of the old Early White Heart, and not very distinct from it. Holland Bigarreau is one of the largest and most beautiful of all the firm-fleshed sorts—and no collection is complete without Downie's Late, to succeed all the foregoing varieties.

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NEW TREE PÆONIAS.—One of the hardiest and most magnificent of shrubs in this climate is the Chinese Tree Pæony.

We are therefore highly gratified to learn that Professor JACKSON of Schenectady (whose unique garden near Union College is the cynosure of all eyes turned thitherward) has succeeded in raising

from the seed some remarkably fine new varieties of this plant, which are likely to surpass in beauty any of the Chinese species or the European seedlings from them.

Among these we learn there is one bearing large, perfectly double, *pure white* flowers, resembling those of the herbaceous *P. whitleji*. This will be a great acquisition to all gardens. Several others are novel in colour, double, and of handsome habit of growth, etc. Among them is a flesh coloured variety; another with pink petals; another nearly full double with the purple stripe of *Papaveracea*—and still another of a very *pale orange*. And these are only a portion of Professor J.'s promising seedlings. As soon as another blooming season is past, we are to have a full account of these really most valuable acquisitions.

We learn that the parent of all these seedlings, is the Chinese poppy-flowered Chinese Tree Pœony (*P. papaveracea*), the single species well known in our gardens. This tendency, which it shows, to run into new double varieties, is a most valuable one to the horticulturist—and since the plant is so well suited to our climate we cannot too strongly recommend the sowing of the seeds with a view to originating a great number of charming sorts. Fertilized with the pollen of the sweet scented Chinese herbaceous sorts (*P. fragrans*), we may probably obtain a hybrid that, to the splendid large flowers of this shrub, shall add all the fragrance of the rose.

The seeds of the Tree Pœony do not germinate till the second year, if planted in the spring, or even later in the autumn. When planted as soon as they are ripe, they will however mostly germinate in the ensuing spring. Nothing is more simple than their after culture. They absolutely require nothing but good garden soil, and an open airy exposure. The *deeper* the soil the taller and stronger will be the growth of the shrub.

.....

Beautiful Tree.—How few persons are there who are familiar with that beautiful tree the Yellow-wood, *Cladastrus tinctoria*, (Tor. & Gray,) formerly known to botanists as the *Virgilia lutea*.

Early in June a luxuriant specimen of this tree, in our grounds, about 14 feet high, bloomed most abundantly, and we cannot sufficiently express our admiration of its many charms at that season. The Yellow-wood belongs to the same natural order as the Locust and the Laburnum, (*Leguminoss.*) Its flowers resemble in general appearance those of the Laburnum, but they are *pure white*, and the clusters are longer and more gracefully formed. The leaves, however, instead of being rather thin and light, like those of the *Locust and Laburnum* is rich and heavy like those of the ash. Although pinnated, they form, from the large size of the leaflets, a rich dark massy head of foliage, and over this is thickly sprinkled the airy clusters of snowy blossoms which are slightly fragrant. It is by far the handsomest tree of its tribe; and taking into account its perfect hardiness—vigorous, healthy growth, and clean broad foliage, it must be placed among the most desirable of all ornamental trees for the lawn and pleasure grounds.

The trunk of the *Yellow-wood*, when the tree is well grown, is remarkable for its smoothness, and the greenish grey colour of the bark, resembling a little in this respect that of the beech.

This tree is a very rare one. In its native localities, Tennessee and Kentucky, it is confined to a small district. It is so little known that both Pursh and Nuttall never appear to have seen it in blossom; both evidently being misled by the specific name of Michaux; and both therefore erring in describing its flowers as *yellow*.

This is usually considered a small tree by botanical authors, but we have seen specimens in some of the fine old gardens in the suburbs of Philadelphia, more than 40 feet high, and exceedingl y handsome in their heads and trunks. No tree is better deserving of propagation than this. It grows readily from the seeds, and we call attention to it now in the hope that the few persons who are in possession, or are in the neighborhood, of bearing trees, will carefully save all the seeds and endeavour to multiply it.

The name, *yellow-wood*, is derived from the hue of the heart wood, which imparts a lively yellow colour to water, and is we believe sometimes used for dyeing.

Torrey and Gray, in their excellent *Flora of North America*, have adopted Rafinesque's name for this genus, which, as they remark, "is wholly distinct from Virgilia."

.....

A valuable new Evergreen.—We are almost destitute, in the climate of the North, of handsome *evergreen shrubs*, for the open garden and shrubbery. We have been much gratified on this account to learn that the pretty shrub called the *Variegated leaved Japan Euonymus*, proves perfectly hardy, wherever it has yet been tried out of doors, for the last three winters. It grows, as we learn, in Japan about twenty feet high,—and with us will probably form a shrub of 10 or 12 feet. It has oval, rather thick leaves, (about half as large as those of the quince) which are bordered on the edge with a silvery margin. The pale pink or white flowers, are borne in July. It grows very freely from cuttings or layers and will, we trust, soon be everywhere planted. It will doubtless make a good low evergreen hedge for the garden, and will bear clipping well.

....

Two sorts of the Locust Tree.—Pray inform me if there are really two varieties or species of the Locust tree. I believe the books only give one species, the Yellow Locust; but I notice so decided a difference in the growth of those in this part of the country and those I knew in Pennsylvania that I suppose them to be distinct. Yours, *W. H. F., New Haven, Con.*

[There is only one species of the common Locust tree recognized by botanists—*Robinia pseudacacia*, but there are several varieties of it produced by cultivation, in gardens.

Still there are two very distinct and strongly marked native varieties, well known on the Hudson, and in some other parts of the country. These are popularly recognized as the *Yellow Locust*, and the *Seed Locust*. They are perfectly distinct in their habit of growth, and are said to differ in their value as timber trees. The first and most common

is the Yellow Locust, which, when full grown, forms a tall trunk with a rather erect and *narrow head*, and bears seeds but sparingly. The second is the Seed Locust, which forms a much larger tree, with a lofty but *spreading* head, and many diverging branches. The bark is rather darker coloured, and the shoots at the ends of the branches are smaller, and more numerous. This kind produces its seeds in such abundance that the branches are thickly hung with pods almost every autumn.

As a timber tree, the Seed Locust is not in this neighborhood considered quite so valuable as the Yellow Locust. But as an ornamental tree we consider it in every respect far superior. Indeed, when the Locust tree is planted for ornament, this is the only one that is worthy of attention.

The common Yellow Locust, beautiful as it is in its varying, lively green foliage, when young, no sooner becomes large, than it becomes a meagre and half-starved looking tree. Its head is full of half-dead branches, and is entirely wanting in dignity and breadth—while it has also lost the lightness and airiness which distinguished it when young. Extremely liable to the attacks of the locust-borer, its branches, perforated by this insect, are broken and lie strewn about the ground after every storm.

The Seed Locust, on the other hand, is as beautiful as the other when young, goes on improving in appearance as it grows old. Its large and broad head of foliage is at once delicate in its portions, and massive in its whole. But little liable to be attacked by the borer, it is very rarely deformed by dead and unsightly limbs.

We should suppose the Seed Locust to be a tree of double the longevity of the other. A couple of years ago, we saw, while visting on the Hudson at Clermont, the venerable seat of Chancellor LIVINGSTON, an avenue of Locusts of this sort, of great size and beauty. The late Hon. EDWARD P. LIVINGSTON then pointed out to us a Locust tree, of this kind, near the front of his mansion, which is the largest and oldest Locust tree we remember to have seen. Its trunk measures in circumference about *twelve feet*, and it has a corresponding head. It was a large tree in the Revolution, and we were informed still bears bullets received at that time in a skirmish which then took place in its vicinity.

The Locust tree is a great deal planted for ornamental purposes on the Hudson, and without any regard to the fact that there are two distinct sorts. The Yellow Locust, being most esteemed for timber, is by far the most commonly seen. The Seed Locust is chiefly abundant on the country seats in the upper part of Dutchess County, N. Y. We do not remember ever to have seen it in New England, where the other sort is common, though it may have escaped our notice. It is unquestionably the only sort deserving the attention of the Landscape Gardener. Its marked habit, and the fact that it always reproduces itself from the seed, have led us to think, of late, that it is really a distinct species.

A great merit of the Locust, for pleasure grounds, is this :—however large the trees, or however thickly they may stand, *the grass beneath always thrives under them better than under any other tree.* This is partly owing to the lightness and thinness of their delicate foliage, and partly to the fact that the foliage being small does not blow away but lodges in the grass and decays there, thus affording nourishment to the roots of the grass.

.....

STANDARD ROSES.—Much as I admire those beautiful things,—standard or tree roses, I am afraid they will never become really established in our gardens, or do us much good in the long run. I have had in my flower garden, and on my lawn, about fifty specimens. They were, all but ten, imported plants, got out by a neighbour of mine, at different times within five years. Little by little, I find they have all died off. At first they thrived and bloomed very well. Afterwards they were gradually affected by the winters, and one after another I lost them. Then again, I fancy that our summers are too hot for the tall naked stems of high standards. They seem to get dry and shrivelled, and thereby they affect the growth and health of the top. I am all the more convinced of this since I have seen some specimens grown by a neighbor. He covers the stem with moss, bound around them. This he leaves on all the year. It undeniably gives more vigor and health to the head—but it also gives the whole tree-rose so unsightly—bandaged—a look that I cannot endure it in a neat place. On the whole, therefore, I shall feel obliged to return to the old, and, in the main, most satisfactory mode of growing roses—i. e. on their own roots. Farther south, say at Baltimore, or Cincinnatti, where the weather is not so cold in winter, no doubt standard roses will do better.—*An Amateur, Boston.*

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MUNIFICENT PATRONS OF HORTICULTURE.—The liberality of the citizens of Boston is widely known, but we desire to express our hearty admiration, at this earliest opportunity, of the spirit which prompted the two handsome donations received this year by the Massachusetts Horticultural Society, for the promotion of the interests of Horticulture. We refer to the donation of $1000 made in January by the Hon. SAMUEL APPLETON, and another of the same amount in February by JOHN A. LOWELL, Esq. Both these gentlemen are residents of Boston, and both have observed for many years the increasing and wide spread usefulness of the Society, in question. Their approval of its course, and their interest in its further efforts, they have thus signified in a manner that at once reflects the greatest honor on the Society, and credit upon themselves.

The Society has securely invested these donations, and the annual interest of each sum is to be applied in the form of medals, bearing the title of the APPLETON MEDALS, and the LOWELL MEDALS.

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THE BEAUTY OF LAUREL HILL, *in June.*—Nothing can well surpass the beauty of Laurel Hill (The Philadelphia Cemetery) at this moment. You know its charming site on the banks of the Schuylkill,—and its original charms, as it was an old and fine gentleman's seat before it came into the hands of the Cemetery company. The love of the Philadelphians for flowers is also well known.

Well—at this season, the grounds of a part of Laurel Hill—the oldest part—is literally a wilderness, or rather a bower of roses. The tea rose, and especially the everblooming rose, seems to be the favorite: and such a profusion of fragrant blossoms I never beheld as there are at the present time. Hundreds of the largest and finest tea roses, Ayrshire, Boursaults,and even moss roses are now in full bloom. The variety of monuments is very great, and some are beautiful; and, at least at the present moment, death appears robbed of its horrors, and invested with an air of beauty. I noticed in the ground many rare and curious trees chiefly planted as I am told by one of the leading managers of the grounds and one of its earliest originators, J. Fay Smith, Esq., among them were the Virgilia, the Deodar Cedar, Cedar of Lebanon, and several rare pines—all thriving well and making the place interesting in an *arboricultural* sense."—*Extract from a letter from Philadelphia.*

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THE PUTNAM RUSSET, *vs.* ROXBURY RUSSET.—"Pray let us know your opinion now, regarding these two apples. Are they identical, or are they not? There has been so much written *pro* and *con*, and, as it appears to me, *without touching bottom at all*, in some of the agricultural papers, that one is at a greater loss than before." Yours,

Providence, R. I. C.

[If our correspondent will only have the goodness to wait till these apples ripen their fruit, this autumn, we can give him a full and *satisfactory* answer. With both these sorts, genuine, before us, it will be hard if the matter cannot be settled in a few moments. Till then, all opinions and historical anecdotes of origin, are of no value whatever. Two things, however, are clear to us at the present moment; first, that more than one spurious "Roxbury Russet" is known by that name in western orchards; and second, the growth of the wood and leaf of young trees in our grounds, that we believe to be the true Putnam Russet, very strongly resemble that of the Roxbury Russet. More in due time.—ED.]

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DUTCHESS COUNTY HORTICULTURAL SOCIETY. A Society has been organized this season, at Poughkeepsie, New-York. Dutchess is the county on the Hudson, most celebrated for the fertility of its soil, and especially for the great beauty of its country seats. This new society is in the best hands, and will, we are confident, have a great influence on the improvement of horticulture, on the river generally, since its membership and its prizes are not confined to those living in that single county. The first exhibition took place on the 18th and 19th of June, and was in all respects, a most gratifying and satisfactory one. Five tables, reaching the whole length of the town hall, were loaded with a profusion of flowers and fruits. The arrangement of flowers in devices, was very tasteful and striking. Twenty-five varieties of cherries were exhibited; some of them unusually large. The strawberries were also remarkably fine; several dishes of Hovey's Seedling were of great size and beauty. But the great merits of the show lay in its vegetables. These were truly of uncommon size, and apparently of great excellence. Cauliflowers of enormous dimensions, such as are very rarely seen; melons, lima beans, beets, potatoes remarkably large, egg plants, and tomatoes, and excellent Indian corn and cucumbers; indeed, a great variety from the kitchen garden, and all of the largest and finest growth. The next exhibition takes place about the middle of September, and judging from this auspicious commencement, will be in every way worthy of the county and the river. The following are the officers of the Society: Dudley B. Fuller, *President;* Robert Donaldson, Thomas Taber, John F. Sheafe, William Kelly, *Vice-Presidents;* John W. Knevels, *Cor. Sec'y*, Joseph H. Jackson, *Rec. Sec'y;* Stephen B. Trowbridge, *Treasurer;* Josiah Williams, Radcliff Van Wagenen, William P. Gibbons, Josiah W. Wheeler, George B. Lent, Edward K. James, *Ex. Com.*

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THE STRAWBERRY QUESTION.—Pretty nearly all the horticultural community are now aware of the different views hitherto entertained regarding the Strawberry culture—and the ground taken, and so strongly urged, by our friend N. LONGWORTH, Esq,, of Cincinnati.

We have given this subject a pretty careful and thorough examination this season, and have compared our own views with those of some of our soundest horticulturists in various quarters.

We shall therefore give our more matured opinion, somewhat in detail, at the first convenient moment,—probably in our next number.—ED.

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THE BLACK PRINCE STRAWBERRY.—We have given an engraving of one of the very finest new Strawberries, in this number, and have spoken of its most excellent qualities.

Our opinion for three years past has been that the BLACK PRINCE, as known in our gardens, is on the whole the *highest* flavored, and the best strawberry yet known in this country. Now, (June 24th,) that the strawberry season is nearly over here, we may repeat that after having compared it with Swainstone's Seedling, Princess Alice, Hovey's Seedling, Ross' Phœnix, Myat's Eliza, Deptford Pine, British Queen, and all the other leading sorts of acknowledged merit, we still consider the Black Prince superior to all in very *high flavor*, and equal to any other sort in productiveness, size and beauty. Every one that has tasted it here this season has immediately concurred in this opinion. It also has proved with us the *hardiest* large strawberry that we have ever cultivated—and we are glad to learn from other growers, in whose hands we have we have placed it, that it promises to do equally well in various parts of the country. We received the Black Prince from the West of England, five years ago. From the fact that Thompson does not rate it among the first, we infer that it succeeds better here than in England.

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TO RESTORE THE HEALTH OF LEMON AND ORANGE TREES.—I cultivate but a few plants in a simple way and among other things I have a great fondness for lemon trees. Like many other persons I have been annoyed very often at finding, every now and then, one of my lemon trees turning yellow in all its leaves, and looking pretty much as

though it had a fit of the jaundice. I have tried at various times all sorts of remedies, and applied to all the scientific gardeners for a bit of advice without getting much satisfaction from the latter, except "Shift the pot;" which latter advice I often followed without getting any benefit.

Last summer I took it into my head to try *soot*, which I have found to be an uncommonly active stimulant. I removed the top soil on the surface of each pot or tub; I replaced it with new fresh mould, and gave the whole a pretty liberal top-dressing of soot. Before a fortnight went by the trees began to improve, and soon took a fresh deep-green look that delighted me. They are all perfectly healthy and vigorous now, and I have repeated the experiment this spring, with other orange trees, with, so far, the best results. By giving this a place in the new journal, you will no doubt serve amateurs like myself, as well as oblige, yours, respectfully. *Citrus. New York, June 10th.*

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Black Bigarreau of Savoy.—We have compared specimens of this cherry, grown here this season, with a cherry we obtained from the late Mr. Parmentier of Long Island, many years ago, and find them perfectly identical in fruit, leaf, and growth. Will any of the pomologists of Boston inform us how this cherry, (B. of Savoy,) differs from the "*New large Black Bigarreau*" of that neighborhood, which, as a distinct sort, we have never yet been able to get a sight of?

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The Longworth Vineyards.—Mr. Longworth of Cincinnati, very obligingly forwarded us last month, a case of American wine, the product of his vineyards, on the banks of the Ohio.

We have been in the highest degree pleased with these wines. They severally are the product of the Catawba, Alexander's, Isabella, and Missouri grapes, all native sorts. The very best wine is the "Catawba," of which we received samples of several vintages. The character of the wine is that of excellent Hock, like the better class wines of the Rhine. We sent a bottle of this Catawba wine, to one of the oldest and most respectable wine houses in this country, Messrs. Binger & Co. of New-York. These gentlemen wrote us in reply: "We are very much gratified in having an opportunity of tasting this wine, which is the first American wine, that deserved the name of wine, that we have ever seen. It strongly resembles Hock, and we should have pronounced it such."

The Catawba, we learn from various growers at Cincinnati, proves as yet decidedly the best wine-grape. The Isabella gives a wine of rather less body, and less character.* The Alexander's, or Schuylkill Muscadel, gives a stronger wine, with much of the character of Teneriffe or Madeira. These light Hock wines, which we understand are now produced in pretty large quantities on the banks of the Ohio, are precisely suited to our climate; and as the Hock character seems to be the natural one afforded by most of our native grapes, we trust it will not be disturbed by any attempt to *manufacture* other wines of a stronger and less wholesome character. These wines are entirely pure, without the addition of alcohol, and the temperance cause has every thing to gain, and nothing to lose, by a general production and consumption of such a light and wholesome beverage. This, every one familiar with the hock and claret districts of Europe, where ardent spirits are not used, will cheerfully bear testimony to. Indeed, until such wines can be produced and afforded, as they will soon be, pure, and at low prices at home, only a small class of persons in this country, will ever know what pure light wines really are. What is sold as such, by the retail dealers in the country generally, is so brandied and manufactured, as to become worse than ardent spirits itself.

The vineyard product of the American grapes is considerably larger than that of the European. We understand the crop of this season looks well as yet, on the banks of the Ohio. Mr. Longworth writes us, June 18th—"Our June is cool, and our late cold rains, for three or four days, have caused the grapes to drop in many vineyards; but the promise of a fine crop is yet good. We shall know in three or four weeks. Grapes disregard heat and drouth with us, but dislike cold, and wet hot weather."

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Buffalo Horticultural Society.—We received from Lewis F. Allen, Esq., President, just as the last form of the Horticulturist was nearly ready for the press, a Report of the exhibition of this Society, held on the 18th of June. Judging from the Report, the show of fruits, flowers and vegetables, in extent and beauty, must have been magnificent. Over one hundred and fifty bouquets, of exceeding beauty and richness, were exhibited, mostly from the Ladies of Buffalo, together with a very great variety of cut flowers from the gardens and green-houses, arranged in every variety of style which the taste of the lady exhibitors could devise. We regret that we have not room for particular descriptions.

Fruits.—The display of Strawberries was very fine, including choice samples of the Methven, Hovey's Seedling, Stoddard's Washington, the Loughborough, Chili, Wilmott's Superb, Kerr's Seedling, Seedlings from B. Hodge, the Roseberry, Carolina, white and red Alpine, Bishop's Orange, Old Pine, Scarlet Seedling, &c. Of Cherries, there were the Turkey Bigarreau, Bigarreau de Lyon, [?] Mayduke, Elton, Holman's Duke, Ox-heart, &c. There was also a fair show of Gooseberries, and a fine Orange tree in full bearing. Of Vegetables also, there was a handsome exhibition.

We quote the closing paragraphs of the Report, made by C. F. S. Thomas, Esq., Rec. Sec.:

"The Committee cannot close their report without rendering acknowledgment for the efficient aid afforded to the Society by the Ladies' Committees, both senior and junior; early on the ground, their presence and efforts shone conspicuously in the arrangement of the exhibition and contributed in no small degree to the success which attended it.

"The Committee cannot but share in the general opinion expressed that the June exhibition far

* One bottle of Isabella—a sweet wine—resembled Muscatel.

surpassed any previous effort of the Society, and they confidently hope that succeeding ones, will show that our efforts are still progressive, and that the influence of our Society may have a lasting and beneficial effect upon the Horticulture of our city and adjacent country."

MASSACHUSETTS HORTICULTURAL SOCIETY.

[We hope hereafter to give full and authentic reports of the proceedings of the Massachusetts, and of the Pennsylvania Horticultural Societies. Our arrangements were not perfected in season to allow us to do so in the present number. Exhibitions of all other Societies of importance, shall also, whenever worthy of notice, receive attention in our columns.—Ed.]

Exhibition of Saturday, June 6, 1846.

FLOWERS—From M. P. Wilder, President of the Society, 8 pots of Calceolarias, (new vars.,) 8 pots fine new Fuchsias, viz: Vesta, Colossus, Britannia, Smith's Queen Victoria, Baudoin; two Ericas, tricolor and ampullacea, Azalea indica, var. Danielsiana.

From Wm. Meller, a fine display of Seedling Geraniums and two bouquets.

From Wm. B. Richards, cut flowers in variety.

From Parker Barnes, Aquilegias, Pæonies, Fuchsias, Roses, and cut flowers in variety.

From Joseph Breck & Co., 4 bouquets, Irises of sorts, Anemones, Pæonies, Roses, Dictamnus fraxinella, 2 var., with cut flowers in variety.

From A. Aspinwall, a great variety of fine Roses.

From Samuel Walker, beautiful Ranunculus and cut flowers in variety.

From Walker & Co., beautiful English Irises; one plant of Hesperis matronalis plena, two of Cactus, two bouquets, and cut flowers.

From John A. Lowell, by Wm. Doyle, an assortment of green house plants, viz: six Geraniums; Kennedia coccinea and monophylla; Cactus speciosa, vandesia and jenksonii; Cereus napoliensis, flagelliformis and scottii; Illicium floridinum, Clematis azurea grandiflora, Melastroma trinerva, Cymbidium aloeifolium, two Oncidiums, Hypericum, Amaryllis, &c.

From Miss Russell, a fine bouquet, and basket of flowers; Roses, Laburnums, and cut flowers.

From J. L. L. F. Warren, one large and eight small bouquets, Amaryllis, &c.

From Cheever Newhall, Chionanthus virginicus, and Liriodendron tulipifera.

From Rev. Samuel B. Babcock, Dedham, a variety of Boursault Roses.

From Messrs. Winship, by E. A. Story, a large vase of Chionanthus virginicus, (a beautiful shrub;) one of the large circular stands filled with a great variety of cut flowers, including Azaleas, Pæonies, Irises, Roses, Loniceras, Laburnums, &c.; one large bouquet, and fine specimens of Papaver bracteatum.

From Messrs. Hovey & Co., fine Anemones, Geraniums, Verbenas, and other cut flowers; six new and fine Cereuses in pots; six roses in pots, and the following twelve greenhouse plants; Achæmenes picta, A. longiflora, Gardenia florida, Erica savileana, Babingtonia camphorosmæ, Polygala latifolia, Cytisus speciosa; Nuttalia, from Texas; Boronia viminea, Diplacus puniceus, Mahernia odorata, and Crassula seedling; also, six pots of Fuchsias, viz: Formosa elegans, Chauvierrii, Defiance, New Globe, Brittania and Majestica. For the Flower Committee,

Joseph Breck, Ch'n.

AWARD OF PREMIUMS.

On Geraniums, Calceolarias, and Bouquets.—The committee appointed to award the premiums on Pelargoniums, Calceolarias, and Bouquets, report that they have attended to their duty, and award as follows: For the best six Pelargoniums in pots, (having reference to previous displays,) a premium to Wm. Quant, of $6. For the 2d best six plants, a premium to Wm. Doyle, gardener to J. A. Lowell, Esq, of $4. For the best four varieties of Calceolarias, a premium to Wm. Quant, of $3. For the best Bouquet, a premium to Messrs. Winship, of $2. For the 2d best do., a premium to Miss Russell, of $1.

The Committee regret that there were not more competitors for Calceolarias, as this flower is well worthy of the amateur's attention. C. M. Hovey, Ch'n.

The Committee—Wm. Quant, Thomas Needham, and Edward Allen—award the following premiums for Cactus and other pot plants, not included in the above: To Messrs. Hovey & Co. for the best six Cactus, of sorts, $3. To William Doyle, for 2d best, $2. To Messrs. Hovey & Co. for the best display of green-house plants, a premium of $8. To William Doyle, the 2d premium, $5. The Committee recommend a gratuity of $5 to the President of the Society, for his beautiful display of green-house plants. For the Committee, Wm. Quant.

On Fuchsias.—To William Quant, the 1st premium, $6. To Messrs. Hovey & Co., 2d premium, $4.

John Galvin, Ch'n.

FRUITS.—Grapes: Mr. John F. Allen, of Salem, presented ten varieties of this delicious fruit. Some of the bunches were finely grown, and as a whole, did Mr. Allen great credit. The following are the names of the sorts:—Black Prince, Black July, Black Hamburgh, Early White, Chasselas de Bar sur Aube, Frontignan, Grizzly, Miller's Burgundy, Muscat of Alexandria, Pitmaston White Cluster. Also, Nectarine, var. Tawney, and two varieties of Peaches—Cooledge's Favorite, and Royal George, (cling.); Green Gage Plums.

From T. Motley, jr., of Dedham, Black Hamburg and White Chasselas Grapes; also, a box of Early Virginia Strawberries.

By J. L. L. F. Warren, Brighton, four varieties of Strawberries, viz: Willey's Seedling, from Cincinnati, Ohio; Mottier's Seedling, do.; Hudson, and Early Virginia; also, Black Hamburg Grapes.

For the Committee, S. Walker, Ch'n.

VEGETABLES.—From J. Lovett, 2d, twelve stalks Victoria Rhubarb, weighing 23 lbs. From T. Motley, jr., by J. Galvin, a brace of Cucumbers. From A. D. Williams, Rhubarb. From Thomas Galvin, Newport, R. I., two brace of Roman Emperor Cucumbers. For the Committee,

A. D. Williams, Jr., Ch'mn.

Exhibition of Saturday, June 13th, 1846.

FLOWERS.—From M. P. Wilder, President of the Society, nine pot plants; four superb new Geraniums, as fine as ever exhibited, viz: Sophia Matilda, Grand Monarque, Excelsa, and Duchess of Sutherland; Fuchsia gigantea, Miller's Victoria, and two Venus victrix.

From J. S. Cabot, fifteen varieties of Pæonies, many of them new and splendid; among them were P. formosa, speciosa striata, elegans, claptoniensis, anemoneflora striata, Reine Hortense, grandiflora carnea plena, bicolor plena, Victoria modeste, Reevesii, Pottsii, Whitleji, &c. Mr. Cabot's collection of Pæonies, embraces the choicest varieties in the country.

From Messrs. Winship, a magnificent pyramid of flowers; a great variety of superb cut flowers, filling the two large vases; Roses, in great variety; Azaleas, and other flowers, in profusion.

From Wm. Kenrick, by Miss Russell, one large and four small bouquets; also, a fine show of Pæonies.

From J. L. L. F. Warren, one large and six small bouquets, Phloxes, Digitalis, Pæonies, Amaryllis, and cut flowers in great variety.

From Augustus Aspinwall, a large collection of Roses, splendid varieties, and fine specimens.

From S. R. Johnson, Pæony whitleji, hardy and perpetual Roses, in great variety.

From Samuel Walker, fine Rununculus; Phloxes, Campanula persicifolia alba, Dictamnus fraxinella, var. alba, and cut flowers in variety.

From Walker & Co, two bouquets, two clusters of Noisette Roses, with an immense number of buds and flowers; Roses in variety, Dahlias, Pæonies, and other cut flowers.

From Joseph Breck & Co., a great variety of Roses; fine Anemones, and Ranunculus in great variety; Campanula persicifolia plena, and var. alba, Pæonies, &c.

From Parker Barnes, Pæonies, Roses, Neapolitan and dwarf Rocket Larkspurs, Pansies, Fuchsias, and other cut flowers. Also, six pots of plants, viz: Fuchsia conqueror, Lilium japonicum, seedling Cineraria, Crassula, Cytisus and Ever-blooming Pink.

From John A. Kenrick, a fine flower of Magnolia macrophylla, Pæonies, Roses, and other cut flowers.

From F. W. Macondry, a variety of fine roses.

From Wm. Doyle, one large bouquet.

From John Hovey, three bouquets.

From William Meller, eight pot plants, viz: one splendid Russelia coccinea, 3 Fuchsias, Geranium, Euphorbia splendens, Rose, (Village Maid,) and Amaryllis. Also, two bouquets, fine Pinks, and other cut flowers.

From W. Quant, splendid Rocket Larkspurs.

From William E. Carter, one large and four small bouquets, Pæonies, Phloxes, Hyacinthus plumosus, and a great variety of other choice perennials.

From Orr N. Towne, Ipomea learii, and a fine Dahlia.

From John Dunklee, a branch with flowers of Liriodendron tulipifera.

From E. M. Richards, Iris, Pæonies, and other cut flowers.

From Hovey & Co., a magnificent display of Roses, including numerous Perpetual, Moss, and other fine varieties.

For the Committee, Jos. Breck, Ch'n.

AWARD OF PREMIUMS.

On Bouquets.—D. Haggerston, W. Quant, E. A. Story, judges. 1st premium of $2, to Miss Russell. 2d premium, of $1, to J. L. L. F. Warren.

Pot Plants—For the best 6 plants, 1st premium of $2, to Wm. Meller. 2d premium of $1, to Parker Barnes.

Cut Flowers—D. Haggerston, W. Quant, Judges. To Messrs. Winship, for a pyramidal design of cut flowers, and for loose flowers in the vases, a gratuity of $3.

FRUIT—J. L. L. F. Warren, of Brighton, presented several dishes and boxes of fine Strawberries, viz: Bishop's Orange, Early Virginia, Hudson, Jenney's Seedling, Willey's Seedling, Hovey's Seedling, and Mottier's Seedling.

By Isaac Fay, of Cambridgeport, Hovey's Seedling, and a Seedling raised by Mr. Fay, of large size and fine appearance.

From A. Aspinwall, a basket of extra large Hovey's Seedling Strawberries.

Two boxes of Strawberries, by Parker Barnes. We should like to taste other specimens of this variety, as we so far think well of it.

Three boxes of Hovey's Seedlings, and two of Virginia Strawberries, by John Gordon, of Brighton.

Josiah Richardson, of Cambridgeport, three Seedlings, all of good size, and a box of Hovey's Seedling Strawberries.

From Hovey & Co., specimens of Hovey's Seedling and Boston Pine Strawberries.

John F. Allen, of Salem, presented the following varieties of Grapes, viz: White Cluster, Black Hamburg, (fine,) Muscat of Alexandria, Early Black July, Chasselas de Bar sur Aube, Grizzly Frontignan, White do., and Black Portugal. Also, some very fine Figs, Peaches, and Nectarines.

[By F. W. Macondry, a dwarf Apple-tree, bearing on its branches 28 apples, about half grown.]

The exhibition of fruit to-day, was very creditable to the cultivators. The seedling specimens by Messrs. Fay and Richardson, are a proof of the interest taken in the country, to produce something of the best quality.

For the Committee, S. Walker, Ch'n.

VEGETABLES—From F. W. Macondry, Prince Albert Peas.

From John Gordon, a fine Cucumber.

From Josiah Bradley, an ear of Egyptian corn.

From D. J. Curtis, Egyptian wheat.

For the Committee, A. D. Williams, Jr., Ch'n.

Exhibition of June 20, 1846.

FLOWERS.—The display of flowers this day was unusually brilliant. The Rose appeared pre-eminent; and never was shown in greater variety or perfection in the Society's rooms. It was premium day for Roses, Pæonies, Pinks and other choice flowers, which brought together numerous exhibitors, who occupied every part of the Hall, and filled every stand and vase with the choicest productions of Flora. It was necessary to limit many of the contributors to a smaller space than they desired, that all might find a place for their flowers.

M. P. Wilder, President of the Society, exhibited a splendid collection of new Geraniums; among them were the Duchess of Sutherland, Beauty Supreme, Rosetta Superb, Symmetry, Flash, Lady Sale, Excelsa, Sophia Matilda, Grand Monarch, Constellation, Miguel, Armenia, Nestor and Unit. Seven pots of Fuchsias. His display of Roses was most superb. In his stand were about 1,000 blooms, embracing a dozen varieties of splendid new Moss, a great variety of Hybrid Perpetuals, and innumerable varieties of other classes of Roses, including new whites. Mr. Wilder's Roses were very fine—but as he declines competing with the members of the Society, no preminm was awarded. We were glad however, to notice that the judges recommended a gratuity.

J. L. L. F. Warren made a fine display of a great variety of Roses and other cut flowers, including fine specimens of Digitalis, two var., Clematis alpina, Campanula persicifolia, Pæonies and other cut flowers. Also, one large circular flat bouquet or design. One fine bouquet, composed of Pansies, and 20 other fine bouquets of various sizes and patterns.

From John Hovey, three pots of Japan Lilies, very beautiful specimens; also, three bouquets and cut flowers.

From Wm. Meller, a great variety of fine Pinks; two bouquets and cut flowers.

From Messrs. Hovey & Co., a fine plant of the new Veronica speciosa, the first time of its flowering in the country. It has elegant spikes of deep blue flowers, which change to nearly white after opening; also, Erica savileana, Crassula Seedling, Maid of Orleans Jasmin, Achimenes picta and longiflora, and Gloxinia variegata; 500 varieties of Hardy Roses; 30 varieties of Perpetual Roses; 20 varieties of Moss Roses, and 5 kinds of Prairie Roses—the Hardy Roses, including several spotted and striped kinds—among them some new and very magnificent; in all, 2,000 blooms.

From O. H. Mather, Brighton, by Thomas Needham, a variety of roses, beautiful specimens of Phlox Van Houtii, and other cut flowers.

From Mrs. J. S. Ellery, by James Nugent, a beautiful specimen of Stipa pinnata or Bird of Paradise grass, (very graceful.)

From Parker Barnes, cut flowers in variety.

From J. L. Gardner, by Daniel Crowley, a variety of Roses.

From Wm. Quant, beautiful specimens of Double Rocket Larkspur, various colors; splendid Double Balsams, Roses, and other cut flowers.

From Wm. Kenrick, by Miss Russell, one large bouquet, two baskets of flowers, small bouquets, Pæonies, Roses, &c.

From W. E. Carter, three large and two small bouquets, Pæonies, and beautiful cut flowers in variety.

From J. S. Cabot, several fine specimens of new Pæonies, viz: Pæonia hericartiana, alba festiva, papaveriflora, elegantissima, claptoniensis, formosa, anemone-flora striata, whitleji, fragrans, humei, and seedling.

From Mr. West, Salem, a large circular bouquet, composed of choice rose buds and flowers.

From Messrs. Winship, one large Trisulc (three pointed) design in one of the large Bradlee Vases; large and beautiful specimens of cut flowers to fill the other vase. A fine display of climbing roses, viz., Prairie Queen, Perpetual Pink, Baltimore Belle, Superbe, Climbing Noisette, &c.; also, Persian Yellow, and other fine Roses, including 6 varieties of Moss; Pæonies, cut flowers, &c.

From John Dunklee, Roses, Kalmias, Dianthus barbata, and other cut flowers.

From Samuel Walker, a great variety of Roses, and a fine Seedling Pink.

From Walker & Co., six Pot Plants, viz: one large Tree Rose, four Cactus, and one Crassula. Roses in great variety, Pæonies, and cut flowers.

From Capt. Macondry, fine Roses and cut flowers in variety.

From Joseph Breck & Co., a great variety of Roses, inclu-

ding six varieties of Moss; Hardy Perpetual, and other varieties; fifty varieties of fine double and semi-double Anemones, fine Ranunculus, Pinks; also, fine specimes of Purple and White Martagon Lilies, Delphiniums, Van Houtii Phloxes, Pæonies, Gladiolus, Clematis alpina, Campanulas, and other cut flowers.

For the Committee, JOSEPH BRECK.

AWARD OF PREMIUMS.

Roses: For the best 30 varieties, Hovey & Co., 1st premium, $8; Breck & Co., 2d premium, $6. For the best display, to Hovey & Co., $4. The best 12 varieties, Daniel Crowley. 1st premium, $5; no other competitor. The best 6 Perpetuals, Hovey & Co., 1st premium, $4; Breck & Co., 2d premium, $3.

The Committee recommend to M. P. Wilder, the President, for his display of Roses, a gratuity of $5; to Messrs. Winship, a gratuity of $4, for their display of Prairie Roses.

David Haggerston, William Quant, Alexander McLennan, Judges.

Ranunculus: Best display, S. Walker, $5; 2d best, Breck & Co., $3.

Anemones: The best display, Breck & Co., $5; 2d best, Hovey & Co., $2.

William Quant, Alexander McLennan, David Haggerston, Judges.

Pæonies: 1st premium to J. S. Cabot, $5; 2d premium, Breck & Co., $4. For the best display, William Kenrick, $3.

Alexander McLennan, David Haggerston, Wm. Quant, Judges.

The Committee on Pinks, Pot Plants, Designs, and Bouquets, have attended to their duty and award as follows:

Pinks—First prize to Wm. Meller, $4. Second prize to Jos. Breck & Co. $3. Display, Wm. Meller, $2.

Pot Plants: First prize to Hovey & Co., $2. Second prize to Walker & Co., $1. A fine plant of Veronica speciosa, by Hovey & Co., a gratuity of $5.

Bouquets and Designs.—Wm. Kenrick, on Bouquets, first prize, $2; Warren, second prize, $1. Design, Messrs. Winship, a gratuity of $2.

For the Committee, PARKER BARNES.

FRUIT.—The Messrs. Hovey presented two large baskets of Hovey's Seedling and Boston Pine Strawberries. The berries were very large, and the flavor delicious. Hovey's Seedling is well known to cultivators through the length and breadth of the land, and we shall be greatly mistaken if the Boston Pine is not found, in a few years, in a very good collection. It is perfect in its organs, and will produce a large crop. We recommend both the varieties as deserving of extensive cultivation.

William Gordon, of New-Bedford, by the politeness of Benjamin Rodman, Esq., a box of Gordon's Seedling, color and size fine, flavor only second rate.

Otis Johnson, of Lynn, three boxes of Hovey's Seedling Strawberries, (fine.)

Joseph Richardson, Cambridgeport, three boxes of Hovey's Seedling, and two boxes of seedling Strawberries. We think somewhat favorably of these seedlings, but wish further specimens before we give an opinion.

Fine specimens of Hovey's Seedling, and also a large dark colored seedling by Mr. Fay.

Wm. Meller, of Roxbury, Seedling Wood Strawberries.

J. L. L. F. Warren, of Brighton, Jenney's Seedling; Mottier's do.; Hovey's do.; Willey's do. Also Red and White Wood Strawberries. The specimens of the White Wood were the best we ever saw. The Jenney's and Mottier's Seedling are very acid, and are not worthy of cultivation. These two varieties, as also the Willey's, we think are better adapted to a southern climate. Mr. Warren also presented specimens of the May Duke and Early Bigarreau Cherries.

J. Fisk Allen, of Salem, again graced our tables with a choice collection of his early Green House Grapes. The color and bloom of his specimens of Black Hamburg were very fine. The Grizzly Frontignan is one of the highest flavor and quality; to the lovers of fine and high flavored fruit, this variety will commend itself when compared with the Black Hamburg. We will only add it is one of the *best*

Mr. Allen also exhibited specimens of the Zinfindel Grapes. Two varieties of Peaches, also fine Nectarines and Figs.

For the Committee, S. WALKER, Chairman.

VEGETABLES.—From Thomas Motley, Jr., by John Galvin, Cucumber of extra size.

From J. A. Kenrick, Victoria Rhubarb.

From J. Hovey, six heads of Cabbage Lettuce.

For the Committee,

A. D. WILLIAMS, Chairman.

PENNSYLVANIA HORTICULTURAL SOCIETY.

THE stated meeting of this Society was held as usual, at the Chinese Saloon, on Tuesday evening, June 16th, the President in the chair. Premiums awarded, were for objects at the intermediate meeting on the 2d inst. For the best Strawberries, (Hovey's Seedling,) to John C Engleman. For the next best, (Methven Scarlet,) to Wm. Johns, and special premiums of one dollar each, to J. B. Baxter, for the "Maryland;" to E. Middleton, for Brinkle's Seedling, called "Higgin's Favorite;" to A. Felton, for "Methven Scarlet," and to Andrew Patton, for the "Hudson." Several Seedlings from Dr Brinkle, were shown; also, a basket of the white variety, by A. Patten. For the best Rocket Larkspurs to Anthony Felton.

For objects on the present occasion:—For the best Garden Roses, to Wm. Hobson. For the best six named Pinks, and the best American Seedling Pink, to John Finlayson. For the best six hot-house plants, to Wm. Hall, gardener to Caleb Cope. For the best six green-house plants, to Mr. Chalmers, gardener to Mrs. Pepper. For the most interesting collection of plants, to the same. For the next most interesting, for the best indigenous plants, for the best Bouquet, and the best indigenous Bouquet, to Archibald Henderson. For the next best Bouquet, to Wm. Hall. A special premium of three dollars, to James Bisset, gardener to James Dundas, for a beautiful exhibition of Achimenes grandiflora and A. picta.

For the best Cherries, (Carnation) to Andrew Patton, gardener to Mrs. Kohne. For the best Grapes, raised under glass, to James Bisset. The Committee called the attention of the Society to specimens of Fastolf Raspberry, by C. Cope, and a Seedling, the "Cushing," by Dr. W. D. Brinkle.

For the most interesting display of Vegetables, to A. Felton. For the best Artichokes, to P. Gallagher; and a special premium of one dollar, to Andrew Patton, for Artichokes.

Members elected.—To honorary membership, John D. Steele, of Chester Co., and Dr. Benj. G. Davis, of Augusta, Maine —Residents, Edward G. Mallery, Charles B. Vogels, Gerhard Vogels, Ezra Stokes, William McDonald, L. Prevost, and John Spencer.

Objects exhibited—At the intermediate, on the 2d inst.—Strawberries, by John C. Engleman, Hovey's Seedling and Bourbon Pine; by Wm. Johns, Methven Scarlet; by Edwin Middleton, Seedlings originated by Dr. Wm. D Brinkle; the Abyssinian Prince, a remarkably fine variety, of a dark rich color, and fine flavor; another quite prolific, the plant bearing 73 perfect berries; another fine plant bearing 53 berries; also, a dish of his "Higgin's Favorite," some berries of which measured 4¾ inches in circumference. By J. B. Baxter, an unknown variety, which he received from "Maryland." By Anthony Felton, Methven Scarlet. By Andrew Patton, Hudson, and white variety, and a number of other kinds from various sources.

On the present occasion, *Plants*—by Wm. Chalmers, by Wm. Hall, by Archibald Henderson, fine collections. *Indigenous*—by A. Henderson, by Wm. Hobson, Garden Roses; by John Finlayson, Pinks; by James Bisset, Achimenes grandiflora picta, and a number of Bouquets.

Fruit—By James Bisset, from James Dundas's collection, very fine Grapes; by Andrew Patton, Cherries; by Wm. Hall, from Caleb Cope's collection, Fastolf Raspberries; by Dr. W. D. Brinkle, Seedling Raspberry, called the "Cushing."

Vegetables—By Anthony Felton, P. Gallagher, Andrew Patton, and Archibald Henderson.

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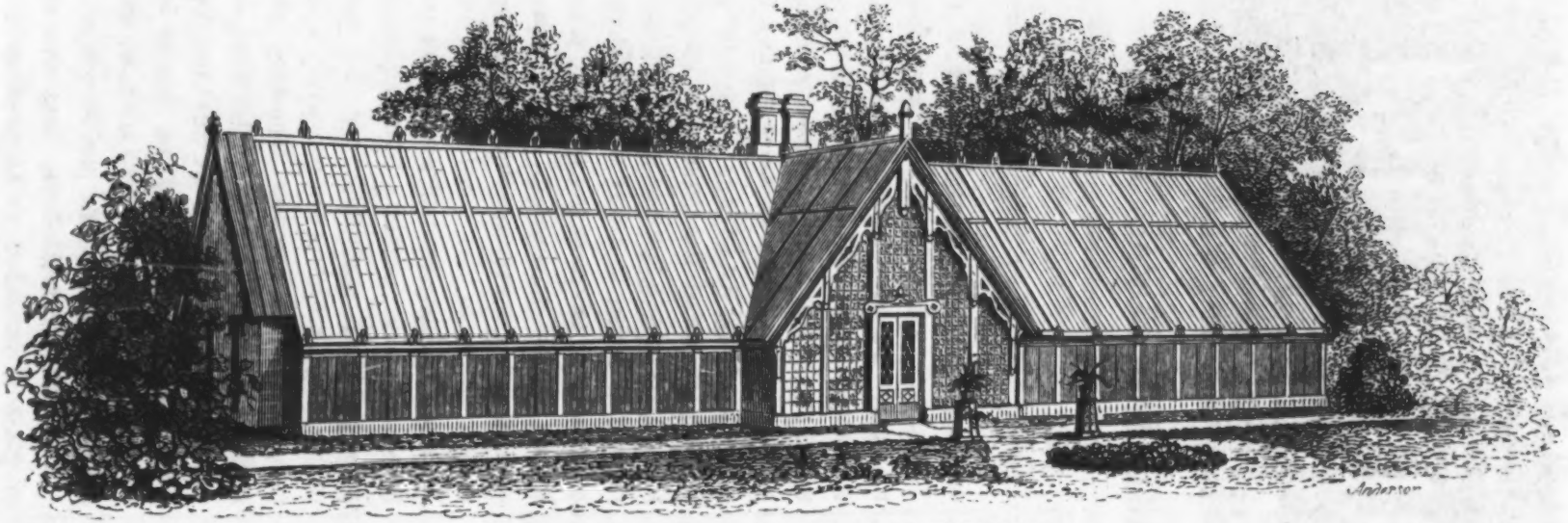

FIG.17. VIEW OF THE VINERY AT BLITHEWOOD.

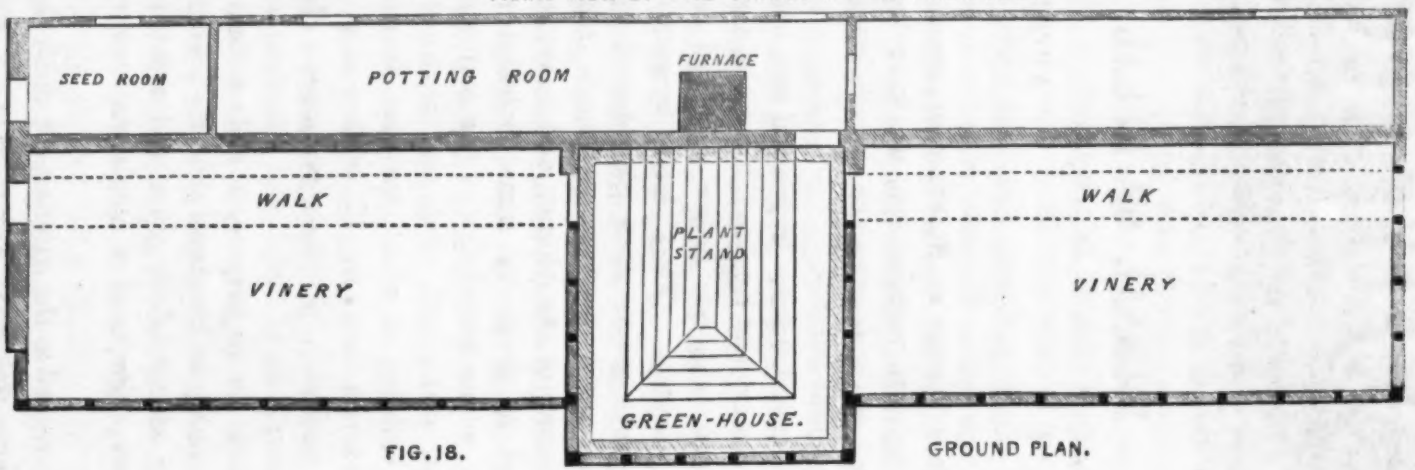

FIG.18. GROUND PLAN.